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ABSTRACT

1973 Florida legislation requires each community college to evaluate the performance of former students in the activities for which they were prepared by the college. This project developed and implemented a follow-up system for community college graduates in Associate in Arts programs. The system assessed former students' achievement of the goals of the academic program for which they were prepared by the community college, in performance or competency-based terms. Specifically, the system should provide means for determining whether the goals of transfer programs, as defined by the community colleges, are being realized. It should also provide data for improvement of the program and/or curriculum where necessary. The results of the implementation of this model indicates that it is a viable model that will be expanded at Hillsborough Community College to include other programs. This model may also be adopted by other community colleges in Florida, and nationally. (RC)

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Abstract of a Major Applied Research Project Presented to Nova University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

A MODEL FOR ACADEMIC ASSESSMENT OF ASSOCIATE IN ARTS GRADUATES IN PERFORMANCE OR COMPETENCY BASED TERMS

by

PATRICIA LOUISE GILL

1975

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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The 1973 Florida State Legislature passed Florida Statute 230.7651, a law that requires each community college in Florida to evaluate the performance of former students in the activities for which they were prepared by the college. The State Board of Education, Community College Division, has published guidelines to assist community colleges in developing and carrying out the intent of this Florida Statute and the subsequent Regulations of the State Board of Education (6A-8.581 (4)).

This major research project develops and implements a model in keeping with the Florida Statute and State Department of Education Guidelines. As a model for academic assessment of graduates, it used follow-up studies developed in performance or competency based terms.

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The model contains five components which involve community college faculty members and graduates as well as instructors in four-year colleges and universities. The five interrelated components are: 1) defining program goals, 2) developing evaluation instruments, 3) collecting data, 4) evaluating data, and 5) developing strategy to introduce the data into the decision-making process. The emphasis was placed on the process used to develop these components.

To implement the system, thirty randomly selected graduates from three transfer programs at Hillsborough Community College were used. These programs were: Pre-Teaching, Pre-Business Administration and Pre-Police Science. The University of South Florida was the only four-year college or university represented due to the large number of Hillsborough Community College graduates from these programs who transfer to this university.

The questionnaires developed were then completed by these graduates and their university instructors. The results were tabulated and distributed to Hillsborough Community College faculty members for revision and recommendations. A final report for each program was prepared and distributed to the institutional decision makers for their action.

The results of the implementation of this model indicates that it is a viable model that will be expanded at Hillsborough Community College to include other programs. This model may also be adopted by other community colleges in Florida, and nationally.

A Model for Academic Assessment of Associates in Arts Graduates in Performance or Competency Based Terms

by

Patricia Louise Gi[illegible], M.A.

A Major Applied Research Project

Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Nova University

1975

Dedication

to my friends,
especially Lou

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My sincerest thanks go to my adviser, Dr. Dale Tillery, for his guidance, dedication and scholarly commitment to my investigation. Secondly, I wish to express my aporeciation to Dr. Valda Robinson, for her encouragement given to me throughout the development of and implementation of this project.

I also want to thank the program managers and faculty members at Hillsborough Community College for their cooperation and the instructors at the University of South Florida for participating in this project.

Finally, I want to thank Ms. Linda Sutliff and Ms. Debbie Hopkins, for without their cooperation this project would not have been possible.

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CHAPTER I

INTRODUCTION

Background of Study

The 1973 Florida State Legislature passed Florida Statute (230.7651), a law that requires each community college in Florida to evaluate the performance of former students in the activities for which they were prepared by the college. The State Board of Education, Community College Division, has published guidelines to assist community colleges in developing and carrying out the intent of the Florida Statute and the subsequent Regulations of the State Board of Education (6A-8.581 (4)).

The state board of education guidelines define the methods of program evaluation to be used as follow-up studies of former students, and identify the questions to be answered in these follow-up studies as:

1. How well is the attainment of the goals and objectives of instructional programs reflected in the performance of former students?
2. Do the requirements of the activities in which former students are engaging extend beyond the program goals and objectives?

The state guidelines continue by describing a set of activities which should be performed in order to evaluate program effectiveness. The activities are:

1. Identifying program goals and objectives;
2. Devising instruments and procedures for assessing:
   a. the performance of former students against the objectives, and
   b. the adequacy of the goals and objectives against the requirements of the activities in which former students are engaging;
3. Utilizing the instrument and procedures for making the above assessments of former students;
4. Drawing conclusions relative to the adequacy of program goals and objectives and make such changes as are appropriate.

Purpose of the Study

The purpose of this research project was to develop and implement a follow-up system for community college graduates in Associate in Arts programs. The system assessed former students' achievement of the goals of the academic program for which they were prepared by the community college, in performance or competency-based terms. Specifically, this system should provide means for determining whether the goals of transfer programs, as defined by the community colleges, are being realized. It should also provide

data for improvement of the program and/or curriculum where necessary.

While the Florida State Department of Education guidelines describe in broad terms the procedure to be used to develop follow-up studies, no specific direction has been given to the Florida community colleges. Institutions have not yet developed methods of collecting information from former students enrolled in transfer programs, analyzing and evaluating this performance or competency-based data, and using this information for the purpose of program improvement. Knoell and Medsker (1965) point out that if community colleges do not prepare students to achieve their baccalaureate degree goals at some acceptable level of performance, the effectiveness of community colleges as a sub-system of higher education will be open to some serious questions. Another and equally important reason for program evaluation through follow-up studies is the demand by state legislators and the public at large to provide some degree of accountability for the outputs of educational programs.

Community colleges have often evaluated the academic performance of former students in terms of grade point average, retention, and vocational success, thereby providing valuable information regarding their programs (Knoell and Medsker, 1965). However, these studies do not meet the criteria to measure and evaluate identifiable performance or competencies of program graduates.

Kintzer (1973) stated that the requirement for four-year colleges or universities to totally accept an associate degree, or a course package certified by the community college system, will become commonplace by the end of this decade. Many states are already mandating articulation procedures. However, there is little evidence that systematic procedures to allow students to move easily through the higher education system are keeping pace with the increased transfers from community colleges to four-year colleges and universities (Kintzer, 1973).

Florida provided an articulation agreement between community colleges and state university systems in 1971. This agreement while stating that community college graduates must be accepted by the state university system, does not provide for complete articulation of all courses. Therefore, access problems still exist and the degree of academic preparation is still being challenged. It was the purpose of this follow-up system to identify the specific areas that are being challenged in each academic program.

The follow-up system developed in this project provided the framework for program evaluation in performance or competency based terms at Hillsborough Community College. The system can be used by other community colleges in Florida, and nationally, as the basis for their system by adapting each component to their administrative and program structure.

All components of this system were developed in keeping with state guidelines (Florida Guidelines, 1974), university structure, Hillsborough Community College structure, and analysis of appropriate literature on information systems development, writing of performance and competency objectives, data collecting, articulation and accountability.

Definitions

For purposes of clarity, the following definitions are used in this study:

Program Manager. Faculty members assigned by the academic director to be responsible for a program have been given the title of program manager.

Program. A planned instructional sequence through which students can expect to develop the competencies required for entry into an identifiable activity is defined as a program (Florida Guidelines, 1973).

Director of Follow-up Studies. The administrator in charge of collecting data for the purpose of evaluating curriculum and/or programs, preparing state reports, and relating all data to the institutional decision makers has been given the title of Director of Follow-up Studies.

Transfer Institution. A college or university offering bachelor or higher degrees to which community college graduates transfer is considered a transfer institution.

Graduates. Individuals who have completed the prescribed curriculum and have been awarded a degree by Hillsborough Community College. This study includes graduates from January 1974, through June 1974, as a population from which to draw a random sample.

Program Goals. Goals defined by the program managers and faculty members stating the competencies or skills to be achieved by a student completing the prescribed curriculum.

Criterion-Referenced Statements or Questions. Statements or questions relating directly to a fixed set of goals stated in performance or competency terms are criterion-referenced.

Program accountability. As reflected in this project, is the term defined as performance, or competency evaluation of the performance, of program graduates in the area from which they received their degree.

Sources of Information or Assistance

To complete this research project, both assistance and information were needed by the Director of Follow-up from Hillsborough Community College faculty, students, graduates and administrators, as well as university students, faculty and administrators. The Hillsborough Community College faculty developed the program goals, evaluated program goals and instruments, evaluated the data collected, and made recommendations for the use of this data. Hillsborough Community College students reviewed instruments for

vocabulary and readability. The community college graduates completed the questionnaires identifying the four-year college or university to which they transferred. The administration provided the necessary support system for the project and implementation of recommendations. The registrar's office identified graduates by program and provided the names, addresses and telephone numbers of these graduates.

The university faculty members were asked to assist in evaluating the instruments and in providing the information about the community college graduates. The University administrators were asked to assist in supporting the project and enlist the aid and support of the faculty members.

Organization of the Study

Chapter II reviews the literature on follow-up studies, articulation and accountability. This chapter identifies the lack of research on program accountability in performance or competency-based terms.

Chapter III describes the methodology that was used to initiate this project. In this chapter an outline of the system and the five components of the system is presented.

Chapter IV is a presentation of the results of the pilot project and includes the instruments developed, data collected and the uses made of this data. This chapter also describes

the criteria used and the success of each procedure.[1] Suggestions are also made regarding the revision of the system and each component of the system.

Chapter V presents a system that can be adopted by any community college in the United States. This chapter outlines the preliminary questions to be examined by an institution and the procedures to be followed to implement a follow-up system in performance or competency-based terms.

Chapter V also describes the significance of this study.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews literature and research on institutional and instructional accountability in higher education, and the relationship of these topics to the need for a competency-based evaluation system of community college graduates who transfer to four-year institutions.

Accountability in Higher Education

Accountability is a term which found increased use in educational publication in the late 60's and 70's. Kingman Brewster, Jr., President of Yale (1971) suggests that managerial accountability is requiring that top administrators be held accountable for overall performance of an institution within a specific time frame. Mortimer (1972) emphasises that accountability of top administrators must permeate the entire institution and its programs if the institution is to be made accountable for student learning.

During the sixties, Cass (1970) questioned whether any institution that enjoys a virtual monopoly can remain sensitive and responsive to the changing needs of its diverse clientele. To answer this challenge, Lessinger (1970) suggested that schools should be evaluated and educators held accountable for student achievement of specific, measurable outcomes of the educational

process. Lessinger (1970) claims that this evaluation of student achievement can be implemented successfully only if the educational objectives of an institution or program are clearly stated.

Literature suggests that the relationship between accurate statements of expected outcomes, accountability and evaluation of programs provide an interrelated process. Specifically, Bloom (1956) points out that goal statements provide a framework for viewing the educational processes and analyzing its workings.

The concept of accountability is based on defining the goals of a program or institution, developing measuring techniques to determine if the goals are achieved, and evaluating the instructional methods to provide guarantees that most students will attain these goals. Accountability suggests that educators assess how well students are being taught and use precise criteria to evaluate both teaching, and changes in student behavior.

It is important that the major goals of a college or program of instruction be clearly identified if the work of the institution is to be guided by some plan (Bloom, 1956). It is by the achievement of these goals that educators can show that students have demonstrated evidence of behaviors that were impossible before teaching took place (Roueche, et. al., 1970). Goal statements also assist teachers, administrators and research workers in curricular development and evaluation, facilitate exchange of information about curricular developments and facilitate the development of evaluation procedures.

Demands for accountability by institutions of higher education are coming from many directions. The most vocal of these are state legislators, the executive branches of the government, and specific communities in which institutions are located.

Therefore, to meet these legitimate demands, institutions of higher education must develop managerial and educational evaluation systems. Mortimer (1972) stresses that to develop an accountability system one must consider all segments of the institution. This system must: assess the needs of the groups being served; describe the situational factors, such as economics, community growth and changing demands of society; and considers the institutional decision-making processes. All of these factors are essential in planning a program of action.

The question of who should be the decision makers must be viewed from the perspective of determining the institutional level at which it is most appropriate for decisions to be made. An answer to the question, "Who is accountable to whom and for what?" becomes tied to the proper duties and responsibilities of each internal component at each decision-making level of the institution and the state goals of that component (Mortimer, 1972). It is these decision makers who determine the nature and extent of staff development needed to implement related activities, measure cost effectiveness, and analyze the results obtained, and they will be

held accountable for their decisions.

No matter what opinion of accountability one holds it is an idea whose time has come (Browder, et. al., 1973). Accountability is a powerful concept, a natural culmination of many parallel activities already accepted, such as planned program budgeting systems, management by objectives, institutional goal setting and evaluation of student performance or competencies. Browder, Atkins and Kays (1973) observe that a commitment to accountability is a necessary precondition to move public education to a new and more effective level of performance and sophistication.

Accountability is particularly applicable to "open door" two year colleges that serve a variety of students, from diverse educational backgrounds. These colleges are concerned with the outcomes of learning rather than the qualifications of students at the time of entry (Roueche, et. al., 1972). The idea of accountability in higher education is quite simple. Brower (1972) states that colleges and universities are responsible for conducting their affairs so that the educational outcomes are worth their cost. Institutions should define goals and outcomes consistent with these goals, provide programs to achieve the goals at a minimum cost, and prove the entire system (Roueche, et. al., 1972).

Accountability demands that educators change their attitudes, renew their creativity and respond to society's needs by

re-establishing public confidence in education (Roueche, et. al., 1972). This demand is being enforced by those in positions to make laws and provide the funds for educational institutions.

The Florida Legislature has recently exerted its influence in the area of educational accountability by passing legislation which fixed the number of hours that a community college teacher must spend in the classroom. They have also demanded that community colleges evaluate their graduates, to assess how well they have achieved the goals of the program in which they were enrolled.

The executive branch of government has also exerted its influence in the area of accountability. The Governor and Cabinet, sitting as the State Board of Education in 1971, mandated a state wide articulation agreement. This agreement provided the basic framework within which students who complete an approved program at a community college are assured of acceptance as a junior when they transfer to a state university in Florida (Guidelines, 1974). Therefore, accountability of community colleges, as defined in this chapter becomes an ever increasing need if these public two-year colleges are to achieve their place in the Florida system of higher education.

It is therefore clear that the age of accountability in higher education is upon us and that, thus far, the systems of evaluation which we have produced are not adequate to meet the demands of a

concerned public and its elected representatives (Garner, 1974).

One method to enhance program and institution accountability is to evaluate the graduates' achievement of success in reaching the program goals defined by the institution. This can be carried out by evaluating the success of community college graduates who transfer to four-year colleges and universities.

Studies of Transfer Students: In the past decade, there have been four national projects that studied various aspects of transfer admission (Willingham, 1973). They are the Knoell-Medsker study of student performance, 1964; Guidelines of the Joint Committee and Senior Colleges, 1966; the Willingham-Findikyan study, a survey of admission patterns, 1967; and the Kintzer survey of articulation in 50 states, 1972. In addition there have been minor studies on the articulation of transfer programs.

Knoell-Medsker Study: As early as 1961 the importance of evaluating the performance of students who transfer from two- to four-year institutions was realized. The Center for the Study of Higher Education at Berkeley intiated a study that was done by Dorothy Knoell and Leland Medsker. The Knoell-Medsker study, using 7,243 junior college students who transfered in 1960 to 43 senior institutions and 3,439 students who entered four-year institutions as freshmen, compared performance of transfer students to native students. This first comprehensive national

study of student transfers from two-year colleges to four-year institutions was a landmark study and served as a basis for the development of articulation guidelines in a number of states.

The Knoell-Medsker study described the characteristics that influenced the success of community college graduates in four-year institutions. The characteristics were the four-year college they choose to attend, demands made on them by community college instructors, and the financial assistance made available to them at the transfer institution.

In considering the characteristics of the four-year college chosen by junior college graduates, it became apparent that four-year institutions needed to examine their policies and procedures regarding transfer students. Knoell-Medsker specifically identified the need for four-year colleges to make space available for transfer students, to assist two-year college transfer students in overcoming financial problems, to improve counseling services, to provide orientation programs for transfer students, to consider developing entirely new programs to accomodate junior college graduates, and to develop curriculum master plans to meet the needs of these students.

The results of this study by Knoell and Medsker (1965) indicate that junior colleges were making it possible for

high school graduates to begin work on a baccalaureate degree, and that most junior college students could be successful in achieving their degree goals.

In terms of these findings it is apparent that junior colleges need to conduct follow-up studies of their students to learn more about the problems they have encountered after transfer and to prepare students to meet these problems (Wattenberger, 1966).

While the Knoell-Medsker study made recommendations to four-year colleges and universities regarding transfer students it neglected the area of competency or performance level evaluation appropriate for the educational programs from which the transfer student came.

Guidelines of the Joint Committee: The Guidelines of the Joint Committee (1966) were developed as a result of the Knoell-Medsker study. These Guidelines were developed and revised through participation by individuals from both junior and senior colleges, thereby providing two way communication. The document provides assistance to junior and senior colleges in improving articulation and is organized under five headings: Admission, Evaluation of Transfer Courses, Curriculum Planning, Counseling and other Student Programs and Articulation Programs. Although policy recommendations were made regarding curriculum evaluation, no direction was given for the collecting of data

specifically regarding the academic performance or competencies of community college graduates.

The Willingham-Findikyan Survey of Admission Patterns: In 1967, the College Entrance Examination Board conducted a survey to identify the movement of transfer students from two-year colleges into four-year colleges. This study found that junior college students received a favorable acceptance rate at most four-year colleges, although conditions varied across the United States. In evaluating acceptance, the access problems that existed nationally were identified as: shortage of financial aid, lack of available space for transfer students, and insufficient effort by four-year institutions to meet the unique needs of transfer students.

Using retention at the four-year institutions as a criterion, this study supported the belief that junior colleges are meeting their objectives as part of higher education systems. While identifying access problems, the study did not evaluate academic preparation of transfer students in performance or competency-based terms nor did it suggest that lack of academic preparation might be a major cause for non-acceptance, or lack of retention.

Kintzer Survey of Articulation: The Kintzer Study of Articulation in 50 states was a national pilot survey completed in the fall of 1970. This study described increasing numbers of

procedures, identified special problems, and evaluated the philosophy of articulation in various states (Kintzer, 1973). Kintzer concluded that, since the Knoell-Medsker study of 1965, there had been little progress in the development of articulation agreements, and he argued for rapid development of statewide plans for articulation. If one accepts Willingham's (1972) philosophy that a major function of community colleges is to provide the first two years of a baccalaureate degree program, it is self evident that programs at the two levels must be articulated to avoid loss of mobility of students.

In the publication, State Master Plans for Community Colleges, 1969, Hulburt analyzed nineteen statewide plans for higher education and noted that, even though studies done nine years before indicated a need to re-evaluate transfer policies and procedures, there was a total absence of such accomplishments. While Hulburt makes a case of examining transfer policies and procedures, he does not outline the need for evaluating the quality of academic preparation provided by community colleges.

Competency-Based Education

Although the literature abounds with data and recommendations concerning transfer students, there is a singularly unique lack of information pertaining to competency-based evaluations of the success of community college students who transfer to a four-year

college or university which can be used as the basis for academic decision-making (Articulation Study Report, 1973). It is important in the improvement of guidance for those community college students intending to transfer to four-year colleges or universities, to develop systems for the evaluation of community college programs in performance or competency-based terms. One method of achieving this is to use follow-up studies which are designed to provide feedback in performance or competency-based terms on the graduates of these programs. These studies would complement information now available regarding the number of transfer students who complete their baccalaurate degree (Willingham, 1972).

The need for follow-up studies to contain input from local colleges is expressed by Knoell and Medsker (1964). They point out that one cannot make valid assessments concerning performance of students independent of the context of the college in which they were enrolled, institutions to which they transferred, and state systems of which they are a part.

In developing a competency-based follow-up system for community college graduates of Associate in Arts programs, the writer used the theory of participating management. If classroom teachers are part of the development of the system, they will have a greater commitment to implement the results of this system which evaluates program graduates success. A model for such participating management is defined by Richardson, Blocker and Bender (1972) who advocate keeping hierarchial levels

to a minimum and continually encouraging communication, problem identification and consensus solutions.

Summary

Accountability is a term that has gained increased use in the 60's and 70's to describe an educational evaluation process. The process of implementation of educational accountability requires the establishment of measurable educational goals and evaluation of these goals. There are many ways this may be accomplished and follow-up studies of graduates in performance or competency-based terms is one method.

Follow-up studies have been done nationally examining various aspects of transfer admission, and retention of transfer students at four-year colleges. However, while problems of access have been evaluated the academic preparation of transfer students in performance or competency terms has not been evaluated. As the number of community college transfer students increase, the importance of program evaluation grows. Therefore, the process developed in this research project is important as a step towards establishment of a model that could be used on a nationwide basis.

CHAPTER III

METHODOLOGY

Introduction

The Florida State Guidelines for implementation of follow-up studies required by the Florida Statutes S230.7651 and regulation of the State Board of Education 6A-8.581(4) are defined in broad terms, allowing each of the 28 community colleges in Florida to design their own methods for collecting the required data. The guidelines describe the following steps to be taken:

1) Identify program goals and objectives;
2) Devise instruments and procedures for assessing:
   a) The performance of former students against the objectives; and
   b) The adequacy of the goals and objectives against the requirements of the activities in which former students are engaged;
3) Utilize the instruments and procedures for making the above assessment of former students;
4) Draw conclusions relative to the adequacy of the program goals and objectives, making such changes as are appropriate; and
5) Draw conclusions relative to the effectiveness of the several components of the programs, including support programs,

in meeting goals and objectives and making such changes as are appropriate (Guidelines, 1974).

This chapter will describe the methodology for developing and implementing a system for the follow-up of graduates in which performance or competency-based criteria are used to assess the achievement of program objectives. This system was implemented using graduates from three transfer programs, Pre-Business Administration, Pre-Police Science and Pre-Teaching at Hillsborough Community College.

In order to understand the framework on which this system was built, some of the history, and the administrative structure of Hillsborough Community College are described. This description will also include a narrative on each program in relation to the Hillsborough Community College multi-campus structure.

Hillsborough Community College

Hillsborough Community College, one of 28 Florida community colleges was opened in 1968. The college has grown from 1,625 students and a faculty and staff of 17 to an enrollment of over 8,000 students and a faculty and administrative staff of 191 in 1974.

One of the purposes of Hillsborough Community College, as stated in the 1974 revision of the college bulletin "is to offer courses and programs of general and academic education parallel to those of the first and second years of work in institutions of the state university system" (Hillsborough Community College Bulletin, 1974 p. 18).

The college is located in four geographic areas and for the purpose of administration, defined as three campuses. The administration of each campus is under the direction of a campus director, who represents his campus on the President's Council, an advisory board to the President.

This advisory board to the president, is composed of: the executive vice-president, administrative assistant to the President, vice-president for auxiliary services, vice-president for business services, three campus directors, two representatives of the faculty, one representative of the career personnel and one representative of the student body. Matters of curriculum, as well as policy and procedures, are evaluated by the President's Council and recommendations are forwarded to the President for his action.

All curriculum and/or program revisions, additions and deletions are recommended to the President's Council by the Academic Affairs Council. This council is composed of five administrators and five faculty representatives, with all campuses represented, as defined in the collective bargaining agreement of 1974.

Evaluation of the success of Hillsborough Community College in achieving its goal of providing academic programs parallel to those of the first and second years of work in institutions of the state university system was the purpose of this research project. The method of evaluation was to assess relevant perceptions of graduates from transfer programs regarding their preparation

for advanced study as well as perceptions of selected instructors at the four-year colleges and universities of the attainment of specific community college goals, perceptions derived from their observations of transfer students.

Programs selected for the study: The criteria used to identify programs to be studied were: 1) sufficient number of graduates to allow sampling of graduates, 2) programs with distinct core courses, and 3) programs in which the program managers indicated an interest in participating in the pilot project. The three programs chosen were: Pre-Teaching, Pre-Business Administration, and Pre-Police Science.

The Pre-Teaching program parallels the Liberal Arts program with the exception of two courses. These two courses are Introduction to Education and Educational Psychology. While Educational Psychology is sometimes taught by full-time faculty members, Introduction to Education is always taught by part-time faculty members. This program is offered on all three campuses. No attempt is made in any of the general education courses required by this curriculum to identify pre-teaching students or to adapt the core courses to the particular needs of the pre-teaching students.

The Pre-Business Administration program is primarily concentrated at the Ybor City Campus. Courses in this area are offered on all campuses, but they are not sufficiently spaced throughout the day and are taught by part-time faculty in many cases. The full-time faculty members in the core area include five at Ybor

City Campus, two at Dale Mabry Campus and one at the Plant City Campus.

The Pre-Police Science program is taught only at the Ybor Campus, and five full-time faculty members are teaching the core courses.

The System: The five interrelated components of the system are: defining program goals, developing the questionnaires, collecting data, evaluating data, and introducing data into the decision-making process.

These five interrelated components were developed to allow revision at each step and to continue to increase participation by more members of the institution of higher education at each step. To be successful at curriculum and/or program revision, the faculty must be convinced of the necessity of these changes. If faculty members are to react, adequate data must be collected from graduates and four-year college and university instructors. Therefore, this system is a participating management system.

This system included collection and analysis of information required to meet state guidelines for follow-up study, as well as, provisions for showing information to the institution decision makers regarding curriculum and/or programs. The system and its components were designed to be used with modifications by other community colleges in Florida and nationally.

Component One - Defining Program Goals

The Florida Department of Education, Community College Division Guildelines (1974), define a program as a course of study leading to a degree, certificate or diploma. These guidelines further define program goals as competency or performance based statements regarding the academic course of study designed by a community college to meet the requirements for a degree, certificate or diploma. In defining program goals, the guidelines outline that they must be statements regarding the performance competencies achieved by students completing a course of study. Using these definitions and the programs as identified in the Hillsborough Community College catalog, the process of defining of program goals was begun.

At the request of the writer (the Director of Follow-up), the campus directors appointed program managers for all programs offered on all campuses. Each program manager was responsible for defining the program goals in performance or competency terms, assisting the Director of Follow-up in developing instruments, analyzing and evaluating the data collected, and in helping in the preparation of state reports and in the making of recommendations to the administrator regarding program and/or curriculum revisions.

An informal meeting was scheduled by the Director of Follow-up

with each program manager. The purposes of this meeting was to explain to the program manager the state system; to request that he or she write program goals for the programs; to describe the proposed follow-up system and to obtain their suggestions regarding this follow-up system.

The Director of Follow-up also used these informal meetings to identify the programs that would be used in the initial study. The criteria used were (1) interest shown by program managers in participating, (2) sufficient number of 1973-74 graduates from which to obtain a sample and (3) programs with different core courses. The programs identified at Hillsborough Community College using these criteria were: Pre-Teaching, Pre-Business Administration and Pre-Police Science.

When the program goals were received from these program managers of these three programs they were: compared to institutional goals and the requirements of the program as listed in the catalog; reviewed to determine whether they were in competency-based terms; coordinated in the case of multi-campus programs; and returned to each program manager for consensus. When consensus was reached, the program goals were presented to the Academic Affairs Council for its evaluation, reaction and information. These program goals were then used as the basis for the competency or performance based questions on the questionnaires. No judgments as to the relevancy of these goals in relation to each program was made by the Director. The built-

in, self-correcting, mechanism of this system would assist in validating the program goals as originally defined.

Component Two - Developing the Questionnaires

There were two questionnaires to be developed: one to be sent to thirty randomly selected graduates of each program and the second to be sent to the graduates' instructors at the four-year institutions. The graduate questionnaire contained three distinct sections: descriptive questions, criteria-reference questions and open-ended evaluation questions. The Instructors' questionnaire only contained two sections: criteria-referenced questions and open ended evaluation questions. Similar questions were used on both questionnaires for the criterion-referenced questions while the open questions were related to the specific strengths and weakness of the program as perceived by the graduates and instructors.

The first draft of the graduate questionnaires were prepared by the Director of Follow-up. These drafts were: sent early in the Fall of 1974 to the seven program managers identified by the campus directors; to twenty faculty members identified by program managers, and to the school psychometrist. They were asked to review the questions, format, and descriptive data requested on the questionnaire and to return the questionnaire with all recommendations within two weeks. Using the suggestions for revisions received, the Director revised the questionnaires and returned the final draft to the program managers and faculty members for consensus (pps. 44-58).

The revised graduate questionnaire was then administered by the program managers to second-year classes of approximately thirty students in each program. When students in these classes had completed the questionnaire, the program manager discussed the questionnaire with them to evaluate vocabulary and format. Any revisions necessary were then incorporated into the final questionnaire.

The questionnaire was mailed in late November 1974 to thirty graduates from each program chosen by use of a random number table. The graduates in this sample were from the student population who graduated between January, 1974 and June, 1974.

The questionnaire for the instructors at the four-year colleges and universities was designed by the Director of Follow-up using the same format for the criterion referenced questions, and open-ended questions. This questionnaire was reviewed by program managers, faculty members, and the school psychometrist. Their comments and suggestions were incorporated into the instrument. This draft was then used at the initial meetings with university personnel to describe the system and data required. The Director of Follow-up made an appointment with the deans and department chairmen at the University and explained the research project, the state guidelines and the information that was required by the community college to complete the state reports. The department chairmen, or deans, then outlined the methodology they considered easiest to obtain data from the instructors in their department.

Component Three - Collecting of Data

Thirty-five students from each program, who graduated between January, 1974, and June, 1974, were identified using a table of random numbers (Owen, 1962). The programs used, as previously indicated, were the Pre-Police Science, Pre-Business Administration and Pre-Teaching at Hillsborough Community College, Tampa, Florida. A first mailing was done using the first thirty graduates identified. As any questionnaires were returned as undeliverable by the post-office, the next number was used to replace this graduate.

The method of collecting the data was a mail questionnaire. A mail questionnaire was chosen because it provides a method of collecting data at a minimum of expenses in money and effort; allows for wider geographic contact; reaches people who are difficult to locate and interview; permits more considered answers from respondents and greater uniformity in the manner in which the questions are posed (Wallace, 1954).

Techniques to increase the percentage returns of mail questionnaires identified by Wallace were utilized. The techniques are appealing to the concern of others, developing a personalized introductory letter, enclosing a stamped envelope, telephoning respondents who do not respond, and mailing a second and third questionnaire.

Each graduate was mailed an individualized letter requesting completion of the questionnaire (Appendix A) and a self-addressed stamped envelope in which to return the questionnaire. If the questionnaire was not returned in ten days, a telephone call was made to the graduate requesting that the questionnaire be completed. A second mailing was done three weeks after the first, followed by a third mailing two weeks later. Records were kept regarding the percentage of returns achieved by each method.

Using the data from the graduate questionnaire, each college that the graduates were attending was identified. For the purpose of this study, no four-year college or university outside Florida was used and only the four-year colleges or universities attended by 10 percent or more of the graduates were included.

When the four-year colleges or universities were identified, the courses in which the Hillsborough Community College graduates were enrolled during the winter term were identified, using the college locator. The college locator is a computerized listing of the courses in which each student is presently enrolled. The instructor of each course was identified by using department files.

The questionnaires for the instructors in the four-year institutions were mailed in the sixth week of an eleven week quarter. A personalized letter (Appendix B) describing this project as a method of implementing state law and Board of Education regulations and a self-addressed stamped envelope were sent with

the questionnaire. If an answer was not received by the end of the winter quarter, a second request was mailed at the beginning of the spring term, followed by a third two weeks later.

Component Four - Evaluation of Data

Two sets of data were analyzed, the data received from the graduates and the data received from the instructors at the four-year colleges and universities. The data collected from the total graduate population in each program were compiled. This analysis contained three parts: descriptions of graduates' present status, graphical representation of criterion-referenced questions, and summary of open-ended questions. The analysis of graduate data from each program was sent early in the winter term to both the program managers and those faculty members identified by the program managers. These individuals were requested to review this data for the purpose of curriculum/program revision and to identify any other faculty member who should receive the information. Responses were requested by the Director of Follow-up within two weeks. If a response was not received within this time frame, a telephone call was made to the individual, followed by an informal note requesting immediate return of the information.

The data received from the instructors at the four-year colleges and universities were analyzed. The responses to the criterion-referenced questions were represented graphically and a summary of open-ended questions was presented. An analysis of this data was requested by the Director of Follow-up within two weeks.

Finally, using all the data collected, a final report was forwarded to the program managers of each program and faculty members identified by the program managers. These individuals were requested to review the data for the purpose of making recommendations and revisions to the questionnaires or goals, evaluating program and/or curriculum revisions that should be implemented and answering the questions required by the state, which are:

1) What findings or conclusions result from the follow-up evaluation of students who completed the program?
2) In analyzing the findings or conclusions, what changes are being considered and/or have been made in the expected outcomes of the programs?
3) In analyzing the findings or conclusions, what changes are being considered and/or have been made in the design and implementation of the instructional support components of the program?
4) Are there requirements of law or regulation external to the college which inhibit needed program modifications?

Component Five: Introducing Data into the Decision-Making Process

All of the information collected from the Hillsborough Community College faculty, graduates and the instructors at the four-year colleges or universities was analyzed and a total report was prepared for each program. These reports were sent to the program managers, faculty member, counselors, and instructional resource faculty, campus directors and Director of Instruction. Those automatically sent the reports included the Academic Affairs Council, the University of South Florida, Hillsborough County Board of Public Instruction and Hillsborough Community College Coordinating Committee plus the College's Planned Program Budgeting Committee. An article outlining the project, listing the reports available and explaining how to obtain a report, also appeared in the official institutional newsletter.

CHAPTER IV

IMPLEMENTATION AND APPRAISAL OF THE SYSTEM

This chapter describes the processes and products of the follow-up system developed to assess student's and instructors' perception of the degree of attainment of objectives of community college graduates who transfer to four-year colleges and universities. To establish the criteria for such assessments, performance or competency-based objectives were used. The resulting system is composed of five components and the processes and products of each component are presented.

The System Takes Shape

The success of the entire system depended on the establishment of a participatory communications network. Participants in this network included: community college faculty members, graduates from community college programs, instructors at the four-year colleges and universities and the decision-makers in the community college. The facilitator of this communications network in this study was the Director of Follow-up.

In developing this communications system with community college and four-year college and university staff members, formal, as well as informal, methods were used. These methods consisted of memoranda, meetings, written reports, telephone calls, luncheons and informal discussions. The contacts with graduates were, in

all cases, through formal letters. (Appendix A)

The initial communications network was comprised of all the program managers and was expanded to include those Hillsborough Community College faculty members, who had been identified by the program managers or who had expressed interest in participating in the project. A random sample of graduates from the Pre-Police Science, Pre-Business Administration and Pre-Teaching programs at Hillsborough Community College was identified to participate. Also, the administrative heads of the departments at the University of South Florida and the instructors in these departments who taught Hillsborough Community College graduates were included.

It should be remembered that utilizing the established criteria for identifying four-year colleges and universities indicated that 83 percent of the graduates presently attending a university were registered at the University of South Florida. Thus, only the University of South Florida was included in this study.

The processes in each program were described as to the extent of involving all participants in the system. However, the extent of involvement of community college program managers and faculty members in developing the questionnaires and using the data collected for decision making were the most important evaluative criteria.

This chapter reviews the initial goals, the questionnaires, used data collected and a description of the use of this data in the decision-making process. Suggestions for revision of the system are included.

The revised goals and questionnaires developed through implementation of this system are discussed in this chapter and presented in the appendices.

Component One - Developing Program Goals

The Pre-Teaching program managers from all campuses submitted a complete set of program goals to the Director of Follow-up. The Director then combined statements from each campus, translating them into performance or competency-based language, and returning the drafts to all program managers for consensus. When consensus was reached, these goals were used as the basis for developing the follow-up questionnaires. There were eight goals for Pre-Teaching.

Table 1

Hillsborough Community College - 1974
Pre-Teaching Program Goals

The graduates of the Pre-Teaching Program will be able to:

1. Demonstrate ability to communicate effectively, both in writing and in speaking.
2. Demonstrate critical and logical thinking in evaluating given information.
3. Demonstrate basic mathematical skills by solving problems and interpreting graphical data.
4. Identify the effects of ethnic culture on individual development, from both historic and present-day views, and demonstrate this

Hillsborough Community College - 1974
Pre-Teaching Program Goals - Continued

by improving interpersonal relations.

5. Develop his or her own value system regarding art and art forms and demonstrate this by attending chosen presentations.
6. Relate daily political, social, and economic events to patterns of past historical incidents for the purpose of making personal life decisions.
7. Interpret scientific facts and their implications to future human development and demonstrate this by making personal and economic decisions, using these facts.
8. Better understand themselves and demonstrate this by establishing personal goals, improving interpersonal relationships and accepting individuals from different cultures.

The Pre-Business Administration program managers from all campuses submitted complete sets of program goals to the Director of Follow-up. The Director then combined statements from each campus, translating them into performance or competency-based language, and returned the drafts to all program managers for consensus. When consensus was reached, these goals were used as the basis for developing the follow-up questionnaires. There were twelve goals for Pre-Business Administration.

Table 2

Hillsborough Community College
Pre-Business Administration Program Goals

The graduates from the Pre-Business Administration program will be able to:

1. Demonstrate ability to communicate effectively in writing.
2. Use mathematical formulas and interpret data related to business.
3. Apply statistical methodology to basic business problems.
4. Identify the effect of culture on individual development from both historic and present-day views.
5. Interpret scientific facts and the implications of the role of scientific data future personal and human development.
6. Evaluate the use of data processing systems in business and demonstrate by presenting adequate information to a computer programmer to facilitate the solving of standard business accounting problems.
7. Evaluate national economics in relation to banking systems, international trade and governmental policies.
8. Display good management policies by relating individual management objectives to company goals.
9. Understand the theory and logic of good accounting procedures and demonstrate this by properly recording business transactions.

Table 2

Hillsborough Community College
Pre-Business Administration Program Goals Continued

10. Implement an accounting system for a small business of 10 million dollars or less per year gross revenue or a standard accounting system for a branch office of a larger business.
11. Demonstrate managerial control in an accounting system by implementing cost analysis to products and services.
12. Analyze a product and factor market to determine pricing.

The Pre-Police Science program manager consulted with the three other members of the department and defined the program goals for the core courses only, asking the Director of Follow-up to add the necessary general education goals. There were eleven goals developed for the Pre-Police Science program.

Table 3

Hillsborough Community College
Pre-Police Science Program Goals

The graduate from the Pre-Police Science Program will be able to:

1. Demonstrate ability to communicate effectively, both in writing and in speaking, using the vocabulary and style necessary in police work.

Table 3

Hillsborough Community College
Pre-Police Science Program Goals Continued

2. Demonstrate basic mathematical skills in problem solving and in interpretation of data.
3. Identify the effect of culture on individual development from both a historic and present day view and relate this information to daily police work.
4. Utilize his/her knowledge of criminal justice agencies and the court system in solving daily problems in police work.
5. Apply the scientific method in the collection, identification and presentation of the evidence in a police investigation.
6. Develop a better understanding of self and demonstrate this through improving interpersonal relations and acceptance of individual differences.
7. Demonstrate understanding of U.S. Supreme Courts decisions relating to the overall operation of the law enforcement agencies.
8. Conduct an investigation and demonstrate this by preparing accurate notes, sketches and reports.
9. Demonstrate an understanding of the role, management and operational functions and facilities of a police department.

Table 3

Hillsborough Community College
Pre-Police Science Program Goals Continued

10. Describe the basic capabilities and services that may be provided by a crime laboratory.
11. Describe managerial and administrative principles involved in traffic law enforcement and education.

The program managers in all three programs were able to identify the goals of their program in performance or competency-based terms. Agreements were reached by the program managers on each campus in the multi-campus programs. The weakness of this component was evident primarily in the Pre-Teaching and Pre-Business Administration programs were the program managers tended to work in isolation when writing program goals. This weakness was remedied later when other faculty members were included in the system, but the system would have functioned more effectively if more faculty members had been included at the first step.

After the first responses were received from the graduates and university instructors, faculty members and program managers suggested that, when writing all program goals, such goals be rank-ordered for easier evaluation of the data. This was done in the revisions for the following year. (Appendix C)

Component Two: Developing the Questionnaire

Hillsborough Community College Graduates. The draft questionnaires for all three programs, consisting of descriptive data regarding the graduate, criterion-referenced questions, and open-ended questions, was prepared by the Director of Follow-up. The program goals were used in preparing the performance or competency-based referenced questions. The open-ended questions allowed students to define courses of special value and to describe the specific strengths and weakness of the program.

These questionnaires were sent to all program managers as well as to the six faculty members in Pre-Teaching, the four faculty members in Pre-Business Administration, and three faculty members in Pre-Police Science who were included in the system at this step. After review, the program managers and faculty members recommended minor changes in vocabulary and the first drafts then were accepted.

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Teaching - Graduate Survey

NAME _____ ADDRESS _____

_____ Zip ____

1. Are you attending college? Full-time ( ) Part-time ( ) No ( ) Major Area

   _____

2. What college are you attending? _____

3. If employed: Is employment related to H.C.C. degree?

   Yes ( ) No ( ) Where? _____

   Supervisor? _____

4. If you have a major advisor or someone who assists you in planning your university program, what is his/her name?

   _____

5. What was your G.P.A. at the end of the last completed university semester?

6. When do you expect to graduate from university? 1975 ( ) 1976 ( ) after 1976 ( )

7. Did you attend H.C.C.: day ( ) evening ( ) weekend college ( )

8. Did your community college program prepare you to:

	Yes	To some Extent	Poorly	No
a. meet all the written communications requirements at the university level?	( )	( )	( )	( )
b. interpret facts and opinions objectively?	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Teaching - Graduate Survey Continued

c. express yourself orally both in class and to peer groups?	( )	( )	( )	( )
d. solve problems which require numerical interpretations?	( )	( )	( )	( )
e. evaluate data presented in graphical form?	( )	( )	( )	( )
f. accept individuals who have been shaped by a variety of American cultures?	( )	( )	( )	( )
g. identify the relationship between group culture and the development of your individual personality?	( )	( )	( )	( )
h. analyze current events and evaluate their effects on your personal welfare?	( )	( )	( )	( )
i. solve problems using critical and logical thinking?	( )	( )	( )	( )
j. evaluate the effectiveness in style and form of the variety of art forms which surround you?	( )	( )	( )	( )
k. evaluate the facts derived from scientific investigations and relate them to their implications on human welfare?	( )	( )	( )	( )
l. identify specific historic actions which help to shape the world today?	( )	( )	( )	( )
m. recognize the forces which motivate you and influence your interpersonal relationships?	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Teaching - Graduate Survey Continued

9. What course or courses did you find most valuable?

_____ Why? _____

10. What course or courses would you recommend to a friend?

_____ Why? _____

11. Which course should be omitted from a pre-teaching program?

_____

12. What would you substitute? _____

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration Graduate Survey

NAME _____ ADDRESS _____

_____ Zip _____

1. Are you attending college? Full-time ( ) Part-time ( )
   No ( ) Major Area _____
2. What college are you attending? _____
3. If employed: Is employment related to H.C.C. degree?
   Yes ( ) No ( ) Where? _____ Supervisor _____
4. If you have a major advisor, what is his/her name? _____
5. What was your G.P.A. at the end of the last completed university semester? _____
6. When do you expect to graduate from university? 1975 ( )
   1976 ( ) after 1976 ( )
7. Did you attend H.C.C.: day ( ) evening ( ) weekend college ( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration Graduate Survey Continued

8. Did your Pre-Business Administrative program at H.C.C. prepare you to:

	Yes	To some extent	Poorly	No
a. meet the written communications requirements at the University level?	( )	( )	( )	( )
b. accept individuals who have been shaped by a variety of American cultures?	( )	( )	( )	( )
c. analyze current events and evaluate their effects on your personal welfare?	( )	( )	( )	( )
d. evaluate facts derived from scientific investigations and relate them to their implications on human welfare.	( )	( )	( )	( )
e. help to recognize the forces which motivate you and influence your interpersonal relationships.	( )	( )	( )	( )
f. evaluate company goals and display a management style in keeping with these goals.	( )	( )	( )	( )
g. apply statistics to basic business problems.	( )	( )	( )	( )
h. meet the mathematics requirements of your University program.	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration Graduate Survey Continued

i. discuss the use of a computer to solve business problems with computer programmers and other business students.	( )	( )	( )	( )
j. evaluate the national economics in relation to businesses.	( )	( )	( )	( )
k. to set up and implement a accounting system for a small business.	( )	( )	( )	( )
l. calculate cost analysis of products and services.	( )	( )	( )	( )
m. to determine pricing in relation to product and factor markets.	( )	( )	( )	( )

9. What course or courses did you find most valuable? _____

   Why? _____

10. Which course or courses provided you with the least amount of useful information? _____

    _____

11. What type of course would you substitute for the above?

    _____

12. Did you find the learning resources adequate at H.C.C. (Library, Learning Laboratory, Tutors, Equipment)? Yes ( ) No ( )

    What changes would you recommend? _____

    _____

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science - Graduate Survey

NAME _____ ADDRESS _____

_____ Zip _____

Are you attending college? Full-time ( ) Part-time ( )
No ( ) Major Area _____

What college are you attending? _____

If employed: Is employment related to H.C.C. degree? Yes ( )
No ( ) Where? _____ Supervisor _____

If you have a major advisor or someone who is assisting you in planning your university program, what is his/her name?

_____

When do you expect to graduate from university? 1975 ( )
1976 ( ) after 1976 ( )

Did you attend H.C.C.: day ( ) evening ( ) weekend college ( )

Did your community college program prepare you to:

	Yes	To Some Extent	Poorly	No
a. meet all the written communications requirements at the university level?	( )	( )	( )	( )
b. communicate effectively using the vocabulary and style necessary in police work and courses?	( )	( )	( )	( )
c. interpret facts and opinions objectively?	( )	( )	( )	( )
d. express yourself orally both in class and to peer groups?	( )	( )	( )	( )
e. solve problems which require numerical interpretations?	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science - Graduate Survey Continued

f. evaluate date presented in graphical form?	( )	( )	( )	( )
g. accept individuals who have been shaped by a variety of American cultures and relate your knowledge to police work?	( )	( )	( )	( )
h. identify the relationship between group culture and the development of your individual personality?	( )	( )	( )	( )
i. analyze current events and evaluate their effects on police work?	( )	( )	( )	( )
j. utilize your knowledge of criminal justice agencies and the court system to solve problems in police work?	( )	( )	( )	( )
k. apply the scientific method in explaining or collecting the facts necessary in a police investigation?	( )	( )	( )	( )
l. explain the overall operation of law enforcement agencies as they relate to U.S. Supreme Court decisions?	( )	( )	( )	( )
m. explain the management and operational functions, role and facilities of a police department?	( )	( )	( )	( )
n. describe the capabilities and services that can be provided by a police laboratory?	( )	( )	( )	( )
o. describe enforcement and education required in traffic enforcement?	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science - Graduate Survey Continued

p. recognize the forces which motivate you and influence your interpersonal relationships?	( )	( )	( )	( )

9. What course or courses did you find most valuable? _____

Why? _____

10. What course or courses would you recommend to a friend?

_____ Why? _____

11. Which course should be omitted from a pre-teaching program?

_____

12. What would you substitute? _____

These questionnaires, after acceptance, were reproduced and disbributed to the program managers for pre-testing with 30 students who were presently enrolled in the second year of their programs. Upon completing the questionnaires, a discussion was held with these students regarding interpretation of the questions and the vocabulary used on the questionnaires. No problems were identified regarding the questionnaires. The questionnaires were then mailed to the graduates in each program.

In reviewing the questionnaires together with the data received from the randomly selected graduates, the program managers in Pre-Teaching on two campuses recommended that in future years the goals be rank ordered. They further suggested that the criterion-referenced

questions be placed in the same order as the goals. Six faculty members and two program managers suggested that questions regarding counseling and library and learning laboratory facilities be added to the questionnaire. These two suggestions have been incorporated into the 1975-76 questionnaires.

Another suggestion, that the questionnaires be modified, was made by a school psychometrist on reviewing the results. This suggestion was to identify each section of the questionnaire; descriptive data, criteria-referenced questions and open-ended questions, in some manner. The method adopted was to use different styles of typing. The psychometrist also recommended that yellow or pink paper be used in order to increase returns. (Appendix D)

University Questionnaire. The Director of Follow-up developed a draft questionnaire for each program to be sent to the University instructors of the graduates from that program. These draft questionnaires were forwarded to the program managers and faculty members in each program. These questionnaires were also used in the discussions with University personnel.

An appointment was made by the Director of Follow-up with the Dean and/or Department Chairman of each program at the University of South Florida. In the College of Education, the meetings were held individually with the Dean of the College of Education and the two department chairmen. At this time, the system, the state

requirements and the questionnaires were discussed. The Dean and Department Chairmen agreed to assist in the project and to encourage their instructors to participate.

In the Business Administration Department, the Dean scheduled a meeting with all the Department Chairmen and the Director of Follow-up. At this meeting, the system, state requirements and the questionnaire were discussed. The University personnel suggested that a "not applicable" column be added to all criteria-referenced questions prior to use. All the department chairmen agreed to assist in this project.

The Department Chairman of the Criminal Justice department called a faculty meeting at which the system, state requirements, and the questionnaire were explained. The members of this department agreed to assist in this project.

As a result of these meetings, it was suggested by the University instructors that a "not applicable column" be added to all questionnaires. This recommendation was adopted in the final questionnaire, shown in the following:

Follow-up Survey
Hillsborough Community College
Pre-Teaching Graduates Attending University

Graduate _____ Address _____

Major Advisor or Professor _____

Subject _____

Follow-up Survey
Hillsborough Community College
Pre-Teaching Graduates Attending University Continued

The H.C.C. graduate named above has identified you as their major advisor or a professor. Would you complete this form regarding the graduate as completely as possible.

1. Do you find the Hillsborough Community College graduate named above prepared to:

	Yes	To Some Extent	Poorly	No	N/A
a. meet the written communications requirements at the university level?	( )	( )	( )	( )	( )
b. interpret facts and opinions objectively?	( )	( )	( )	( )	( )
c. express himself/herself orally in class and conferences?	( )	( )	( )	( )	( )
d. solve problems which require numerical interpretations?	( )	( )	( )	( )	( )
e. evaluate data presented in graphical form?	( )	( )	( )	( )	( )
f. accept individuals who have been shaped by a variety of American cultures?	( )	( )	( )	( )	( )
g. identify the relationship between group culture and the development of individual personality?	( )	( )	( )	( )	( )
h. analyze current events and evaluate the effects on personal welfare?	( )	( )	( )	( )	( )

Follow-up Survey
Hillsborough Community College
Pre-Teaching Graduates Attending University Continued

1. use critical and logical thinking in solving problems? ( ) ( ) ( ) ( ) ( )

	Yes	No
2. Do you feel the graduate was prepared to undertake the academic requirements of university?	( )	( )

Comments: _____

_____

3. Do you feel the graduate understood the job opportunities and demands of the program for which they were training? ( ) ( )

Comments: _____

_____

4. Do you feel the graduate was prepared to evaluate and use the support resources of the University? ( ) ( )

Comments: _____

_____

5. On the basis of your knowledge of Community College graduates, would you recommend other students receive their first two years of education at a Community College? ( ) ( )

Comments: _____

_____

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration
University Survey

INSTRUCTOR/ADVISOR _____

ADDRESS _____ DEPARTMENT _____

GRADUATE _____

1. For what course or courses did you have this Community College graduate as a student?

_____ None ( )

2. Do you find the Hillsborough Community College graduate named above prepared to:

	Yes	To Some Extent	Poorly	No	N/A
a. meet the written communications requirements at the university level.	( )	( )	( )	( )	( )
b. recognize the forces which motivate him/her to improve interpersonal relationships.	( )	( )	( )	( )	( )
c. prepared to evaluate management styles if given company goals.	( )	( )	( )	( )	( )
d. apply statistics to basic business problems.	( )	( )	( )	( )	( )
e. meet the mathematics requirements of your university program.	( )	( )	( )	( )	( )
f. discuss the use of a computer to solve business problems with computer programmers.	( )	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration
University Survey Continued

g. evaluate the national economics in relation to business.	( )	( )	( )	( )	( )
h. display knowledge of accounting systems adequate for a small business.	( )	( )	( )	( )	( )
i. analyze cost of products and services.	( )	( )	( )	( )	( )
j. describe pricing techniques in relation to product and factor markets.	( )	( )	( )	( )	( )

3. Do you feel the graduate was prepared to undertake the academic requirements of the university?

   Yes ( ) No ( )

   Comments: _____

   _____

   _____

4. Do you feel the graduate was prepared to evaluate and use the support resources of the university?

   Yes ( ) No ( )

   Comments: _____

   _____

   _____

5. In which academic area did you feel the graduate was most prepared? _____

   _____

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Business Administration
University Survey Continued

6. In which academic area did you feel the graduate was least prepared? _____

_____

7. On the basis of your knowledge of Community College graduates, would you recommend other students receive their education at a Community College?

Yes ( ) No ( )

Comments: _____

_____

_____

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science
University Survey

INSTRUCTOR/ADVISOR _____ DEPARTMENT _____

ADDRESS _____

GRADUATE _____

1. For what course or courses did you have the Community College graduate as a student?

_____ None ( )

2. Do you find the Hillsborough Community College graduate named above prepared to:

	Yes	To some Extent	Poorly	No	N/A
a. meet all the written communications requirements at the University level?	( )	( )	( )	( )	( )

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science
University Survey Continued

b. interpret facts and opinions objectively?	( )	( )	( )	( )	( )
c. express themselves orally both in class and to peer groups?	( )	( )	( )	( )	( )
d. solve problems which require numerical interpretations?	( )	( )	( )	( )	( )
e. evaluate data presented in graphical form?	( )	( )	( )	( )	( )
f. accept individuals who have been shaped by a variety of American cultures.	( )	( )	( )	( )	( )
g. utilize their knowledge of criminal justice agencies and the court system to solve problems.	( )	( )	( )	( )	( )
h. explain the overall operation of law enforcement agencies as they relate to U.S. Supreme Court decisions?	( )	( )	( )	( )	( )
i. explain the management and operational functions, role and facilities of a police department?	( )	( )	( )	( )	( )

3. Do you feel the graduate was prepared to undertake the academic requirements of the university?

Yes ( ) No ( )

Comments: _____

Component Three: Collecting of Data

Hillsborough Community College Graduates. The first mailing of 30 questionnaires to the graduates from each program was done in November 1974, immediately before the Thanksgiving vacation. The mailing included a personalized letter, self-addressed, stamped, return-addressed envelope and the questionnaire.

Two weeks after the first mailing, those graduates who had not returned their questionnaire were telephoned. Although the method of telephoning increased returns, after three attempts many students could not be reached and in some cases where the family could be reached, they could not speak English. Because of the cost and time involved, this method of contacting graduates will not be continued.

The second mailing was done in the middle of December and a third mailing was done the day before Christmas vacation. These methods of contacting graduates produced the following returns:

TABLE 4

Graduates Rate of Response to Questionnaire

	1st Mailing	Telephone	2nd Mailing	3rd Mailing	Cumulative Percent
Pre-Teaching	14	4	3	2	77
Pre-Business Administration	11	3	7	4	83
Pre-Police Science	11	2	6	1	70

The overall returns of 74 represents 75 percent. A 75 percent return is an acceptable rate of return for a mail questionnaire (Wallace, 1974).

Of these, 70 percent were attending University of South Florida. Therefore, this was the only four-year college or university included in the system.

	Total Response	Attending University	Percent of Respondents Attending University
Pre-Teaching	77	16	66
Pre-Business Administration	83	14	58
Pre-Police Science	70	13	59

All of the graduates who returned the questionnaire answered the entire questionnaire. Seventy graduates (or 99 percent of those answering), offered comments to the questions, and 32 graduates (or 45 percent) offered additional comments regarding the program from which they received their Associate in Arts degrees.

The mean of all criteria-referenced questions was established, using a four-point scale. This scale used "yes" as four points and "no" as one. These means were then graphed, using all graduate responses for each program. (Figures 2, 3, 4)

In describing the graduates who did not return the questionnaire in relation to those who did respond, the characteristics of age, grade point average and credits earned at Hillsborough Community College were examined, as shown in Figure 1.

FIGURE 1

Average Characteristics of Respondents vs. Non-respondents

	Age		Grade Point Average		Credit Earned at H.C.C.	
	R	NR*	R	NR	R	NR
Pre-Teaching respondents - 23 non-respondents - 7	25	23	2.95	2.5	55.9	61
Pre-Business Administration respondents - 26 non-respondents - 4	26	27	3.05	2.7	55.6	65
Pre-Police Science respondents - 22 non-respondents - 8	21	29	3.16	3.05	51.7	59

*NR = Non Respondents

Examination of these tables indicated that the non-respondents were older, had a somewhat lower grade point average, and had accumulated more credits before receiving a degree. No conclusions can be drawn from these results because the sample of non-respondent was very small.

University of South Florida Instructors. Using the University of South Florida locater for Winter Term 1974, 54 instructors who were teaching Hillsborough Community College graduates were identified. The numbers in each program were:

	N
Pre-Teaching	29
Pre-Business Administration	15
Pre-Police Science	10

The questionnaires were mailed to these instructors in the sixth week of an eleven-week term. The mailing included a letter explaining the project, a self-addressed, stamped envelope and the questionnaire. On receipt of the questionnaire and letter, three instructors telephoned the Director of Follow-up for further instructions. Also, two instructors wrote the Director of Follow-up for further clarification of the project. All of these inquiries were answered, and led to a revision of the letter of explanation (Appendix E).

The second mailing was done in the first week of the Spring term. For the purpose of the second mailing, the revised letter was used. This letter contains more detailed information regarding each student.

The third mailing to the University instructors was done two weeks later. The response to these mailings were:

TABLE 5

University Instructors
Response to Mail Questionnaires

	1st Mailing	2nd Mailing	3rd Mailing	Percent
Pre-Teaching	17	3	3	79
Pre-Business Administration	7	4	3	93
Pre-Police Science	10	0	0	100

Three University instructors, representing 15 percent, responding to these mailings indicating that the students never attended the courses in which they had been registered.

The total returns of 47 of the 54 university instructors questioned represents an 80 percent return. Of those who responded, 40 which represents 74 percent, were able to answer the questionnaire.

These results represent adequate returns for this type of questionnaire. They also indicate that this system is successful in obtaining evaluation information regarding performance of graduates in transfer institutions, and provides the necessary data for program evaluation.

Component Four: Analysis of Data

Hillsborough Community College Graduates. The criterion referenced data from the graduates who responded in each program was graphed. These graphs are as shown on Figure 2, 3, 4.

FIGURE 2

Mean Responses of Pre-Teaching Graduates to Criterion Referenced Questions

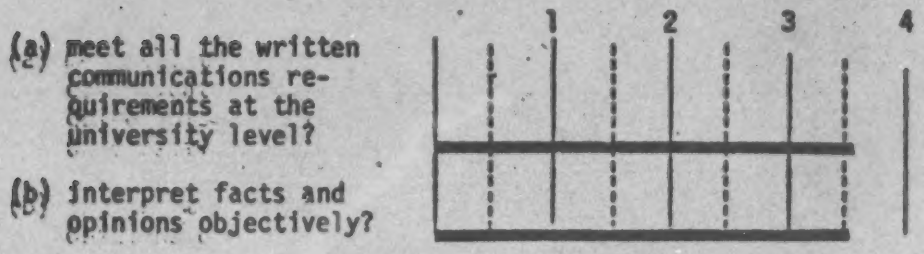


FIGURE 2

Mean Responses of Pre-Teaching Graduates to Criterion Referenced Questions Continued

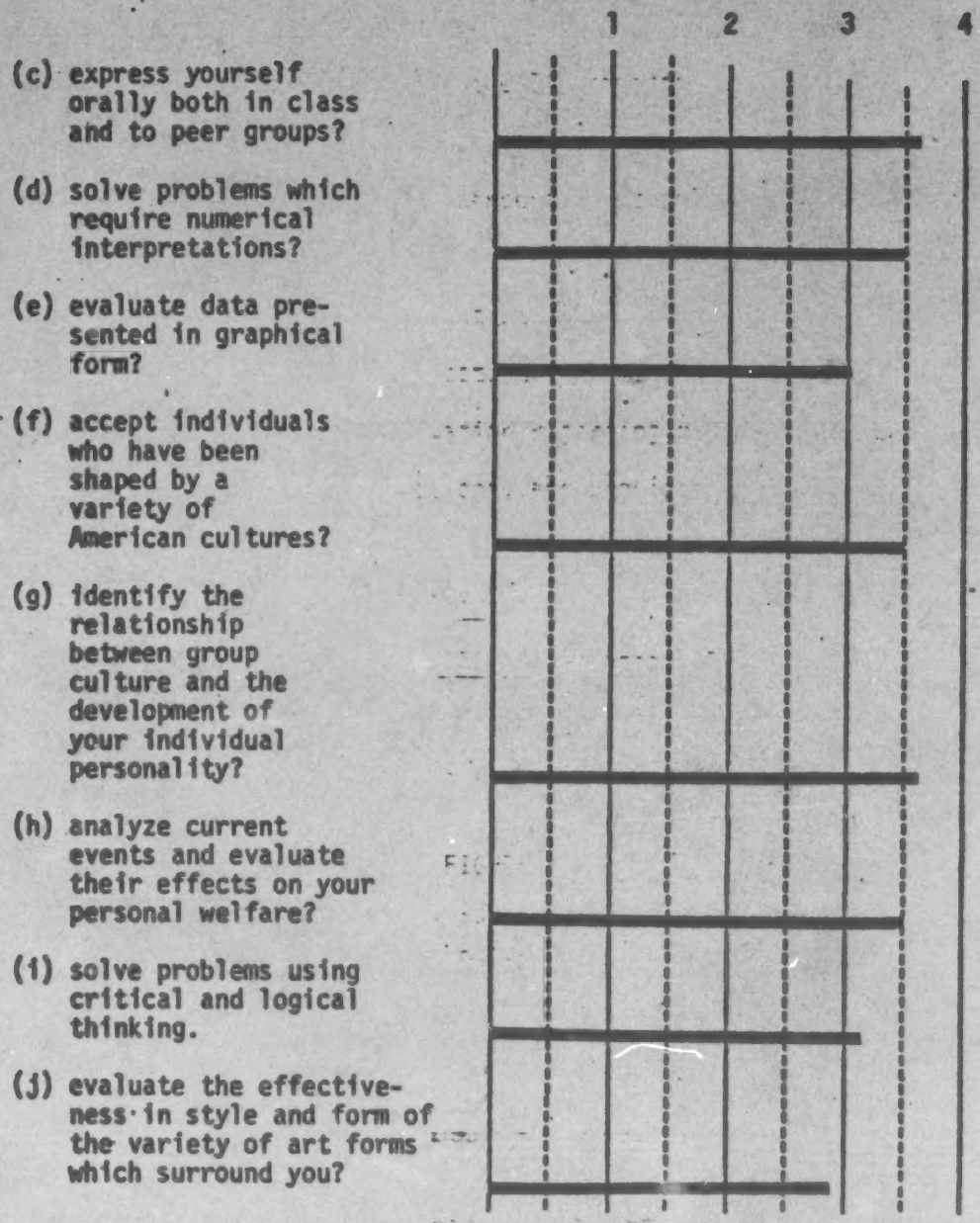

1
2
3
4
(c) express yourself orally both in class and to peer groups?
(d) solve problems which require numerical interpretations?
(e) evaluate data presented in graphical form?
(f) accept individuals who have been shaped by a variety of American cultures?
(g) identify the relationship between group culture and the development of your individual personality?
(h) analyze current events and evaluate their effects on your personal welfare?
(i) solve problems using critical and logical thinking.
(j) evaluate the effectiveness in style and form of the variety of art forms which surround you?

FIGURE 2

Mean Responses of Pre-Teaching Graduates to Criterion Referenced Questions Continued

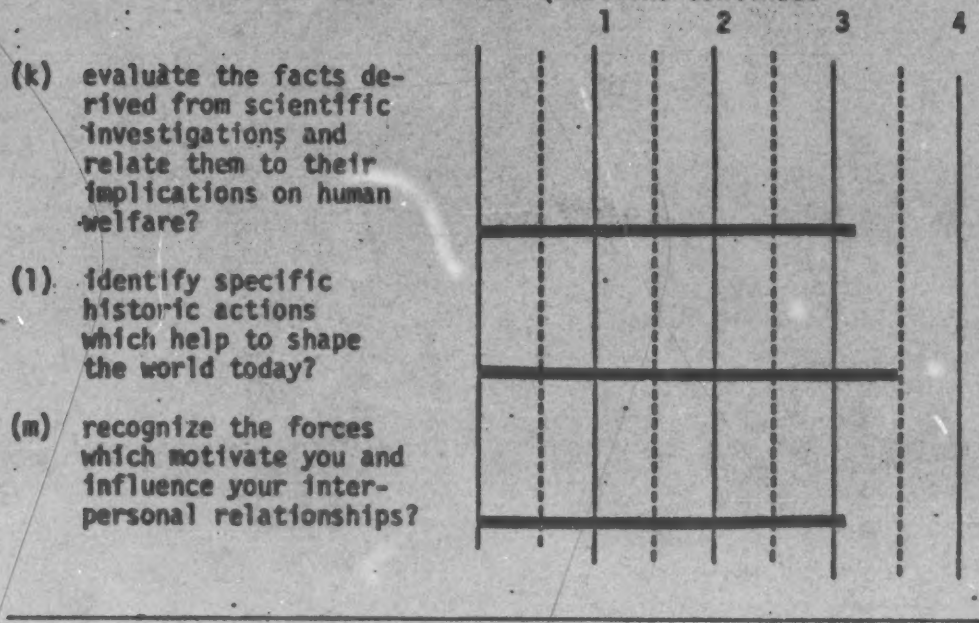

1
2
3
4
(k) evaluate the facts derived from scientific investigations and relate them to their implications on human welfare?
(l) identify specific historic actions which help to shape the world today?
(m) recognize the forces which motivate you and influence your interpersonal relationships?

FIGURE 3

Mean Responses of Pre-Business Administration Graduates to Criterion Referenced Questions

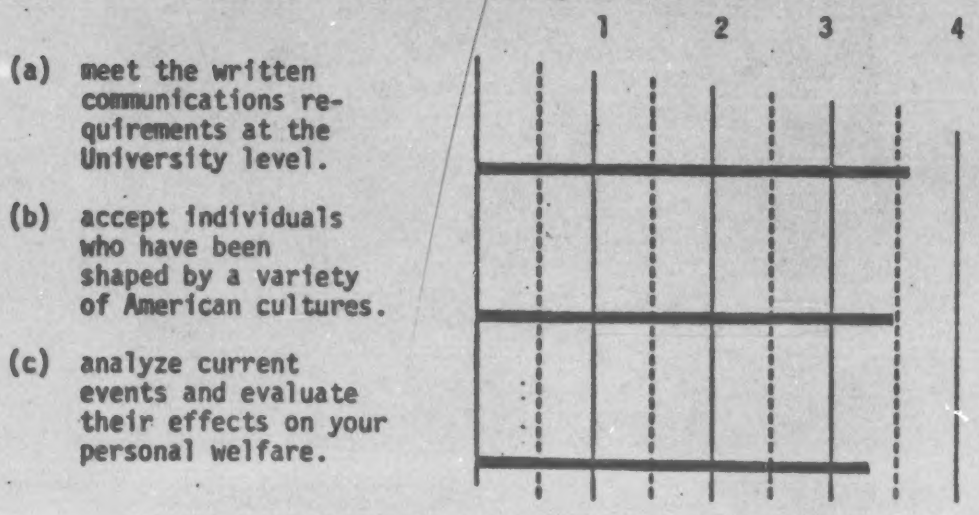

1
2
3
4
(a) meet the written communications requirements at the University level.
(b) accept individuals who have been shaped by a variety of American cultures.
(c) analyze current events and evaluate their effects on your personal welfare.

FIGURE 3

Mean Responses of Pre-Business Administration Graduates to Criterion Referenced Questions Continued

(d) evaluate facts derived from scientific investigations and relate them to their implications on human welfare.

(e) help to recognize the forces which motivate you and influence your interpersonal relationships.

(f) evaluate company goals and display a management style in keeping with these goals.

(g) apply statistics to basic business problems.

(h) meet the mathematics requirements of your University program.

(i) discuss the use of a computer to solve business problems with computer programmers and other business students.

(j) evaluate the national economics in relation to businesses.

(k) to set up and implement an accounting system for a small business.

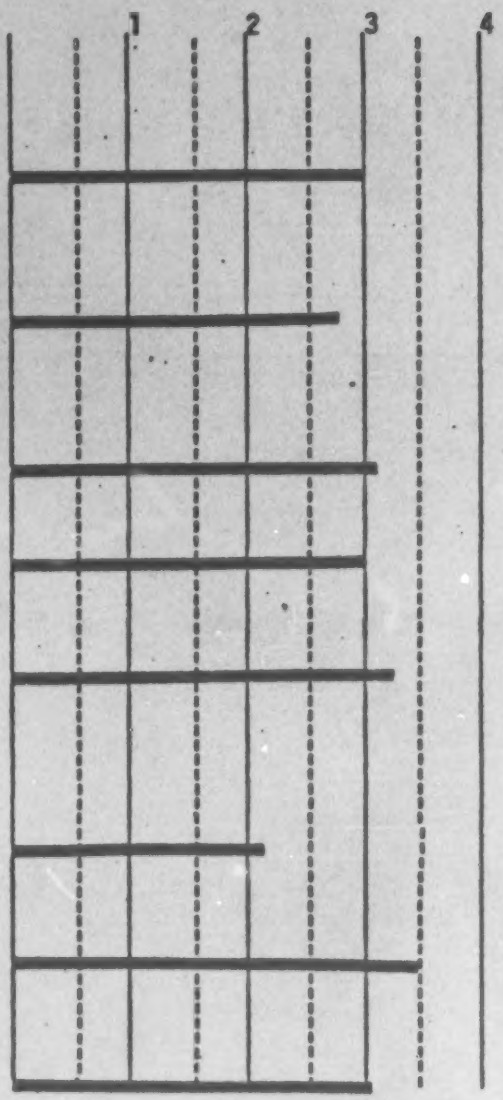


FIGURE 3

Mean Responses of Pre-Business Administration Graduates to Criterion Referenced Questions Continued

(l) calculate cost analysis of products and services.

(m) to determine pricing in relation to product and factor markets.

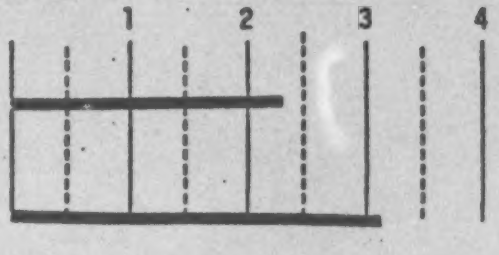


FIGURE 4

Mean Responses of Pre-Police Science Graduates to Criterion Referenced Questions

(a) meet all the written communications requirements at the university level?

(b) communicate effectively using the vocabulary and style necessary in police work and courses?

(c) interpret facts and opinions objectively?

(d) express yourself orally both in class and to peer groups?

(e) solve problems which require numerical interpretations?

(f) evaluate data presented in graphical form?

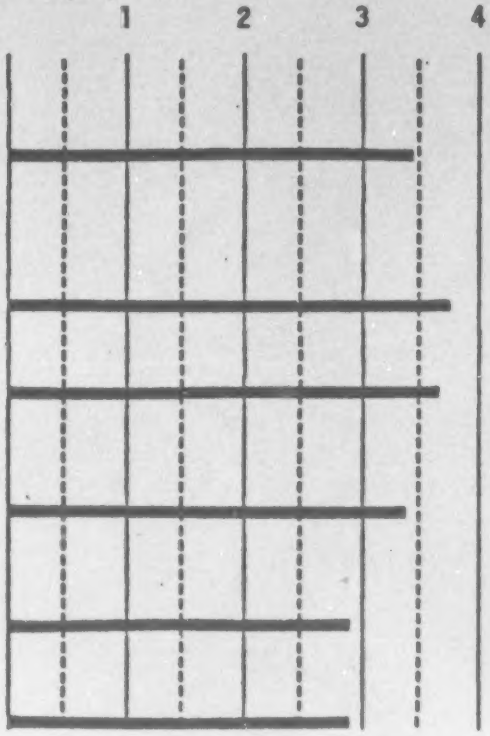


FIGURE 4

Mean Responses of Pre-Police Science Graduates to Criterion Referenced Questions Continued

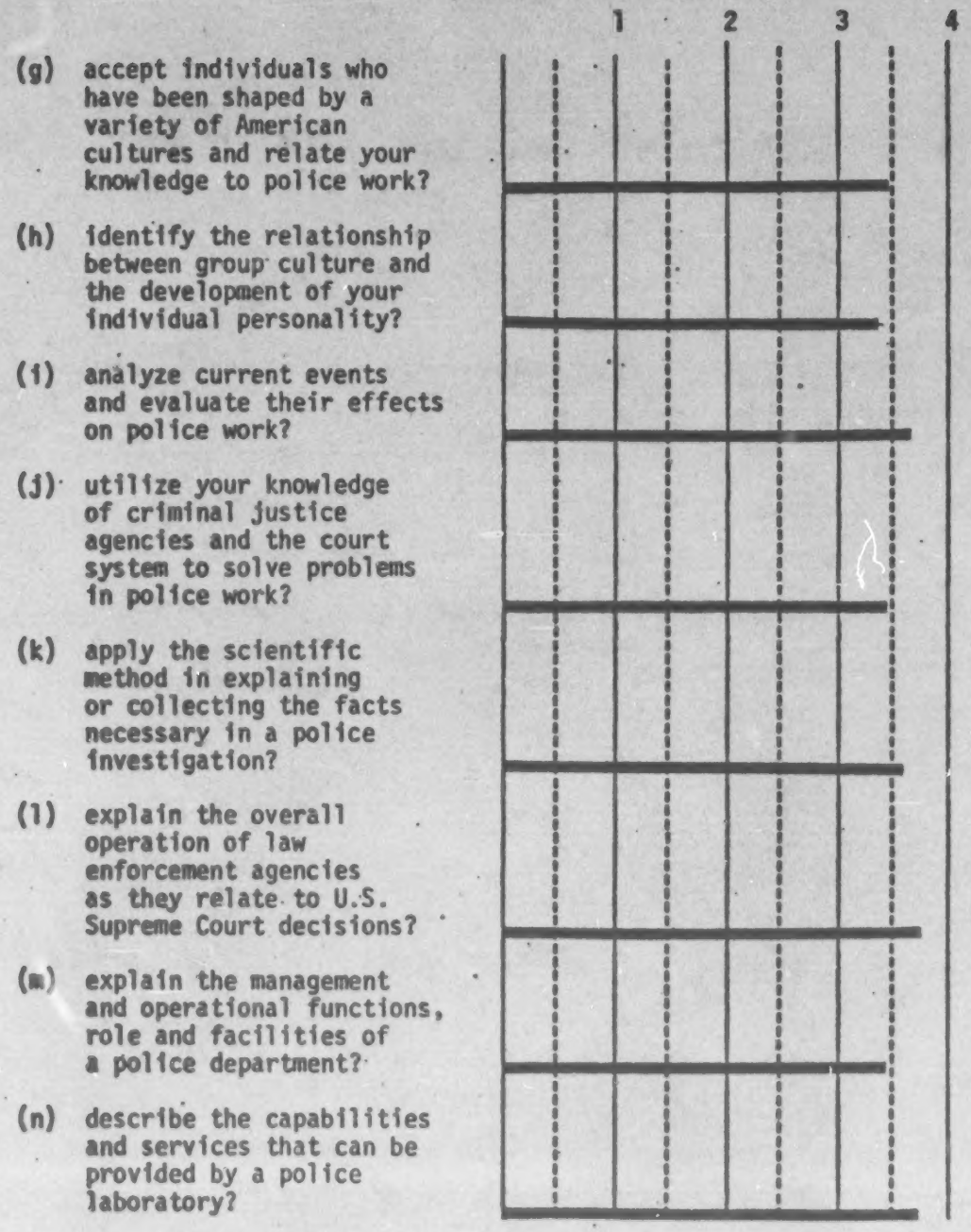
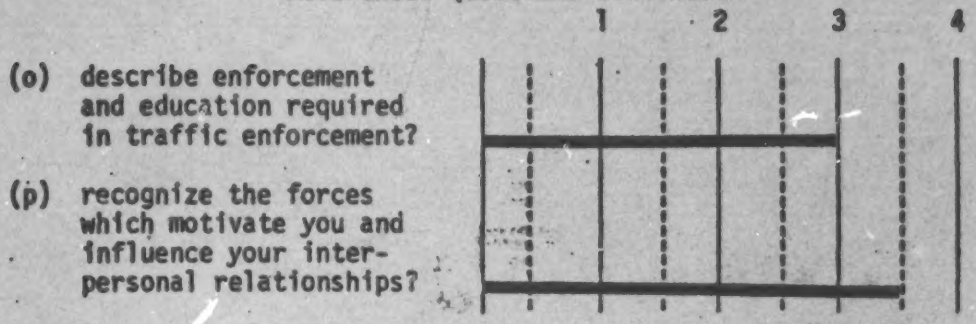

1
2
3
4
(g) accept individuals who have been shaped by a variety of American cultures and relate your knowledge to police work?
(h) identify the relationship between group culture and the development of your individual personality?
(i) analyze current events and evaluate their effects on police work?
(j) utilize your knowledge of criminal justice agencies and the court system to solve problems in police work?
(k) apply the scientific method in explaining or collecting the facts necessary in a police investigation?
(l) explain the overall operation of law enforcement agencies as they relate to U.S. Supreme Court decisions?
(m) explain the management and operational functions, role and facilities of a police department?
(n) describe the capabilities and services that can be provided by a police laboratory?

FIGURE 4

Mean Responses of Pre-Police Science Graduates to Criterion Referenced Questions Continued


1
2
3
4
(o) describe enforcement and education required in traffic enforcement?
(p) recognize the forces which motivate you and influence your interpersonal relationships?

The descriptive data and comments were condensed and became part of the package forwarded to the program managers and faculty members who were part of the system. They were asked to comment on this information within two weeks.

The number of Hillsborough Community College faculty including program managers who were involved in the system at the time were:

	N
Pre-Teaching	11
Pre-Business Administration	9
Pre-Police Science	5

Hillsborough Community College program managers and faculty members were also sent the program goals and questionnaires and asked to review the package for any recommended changes.

When the information was not returned within two weeks, the Director of Follow-up telephoned those faculty members not responding. For eight individuals, a third telephone call was necessary.

TABLE 6

Hillsborough Community College
Faculty Members and Program Managers
Response to Evaluation Requests

	1st Request	1st Telephone Request	2nd Telephone Request	Percent
Pre-Teaching	7	3	1	100
Pre-Business Administration	3	4	1	88
Pre-Police Science	0	3	1	100

Ten of the faculty members who responded recommended that additional faculty members' names be added to the system.

Of the individuals who reviewed the data, 19 recommended curriculum changes, ten suggested revisions to the questionnaire, and five suggested revisions of the goal statements.

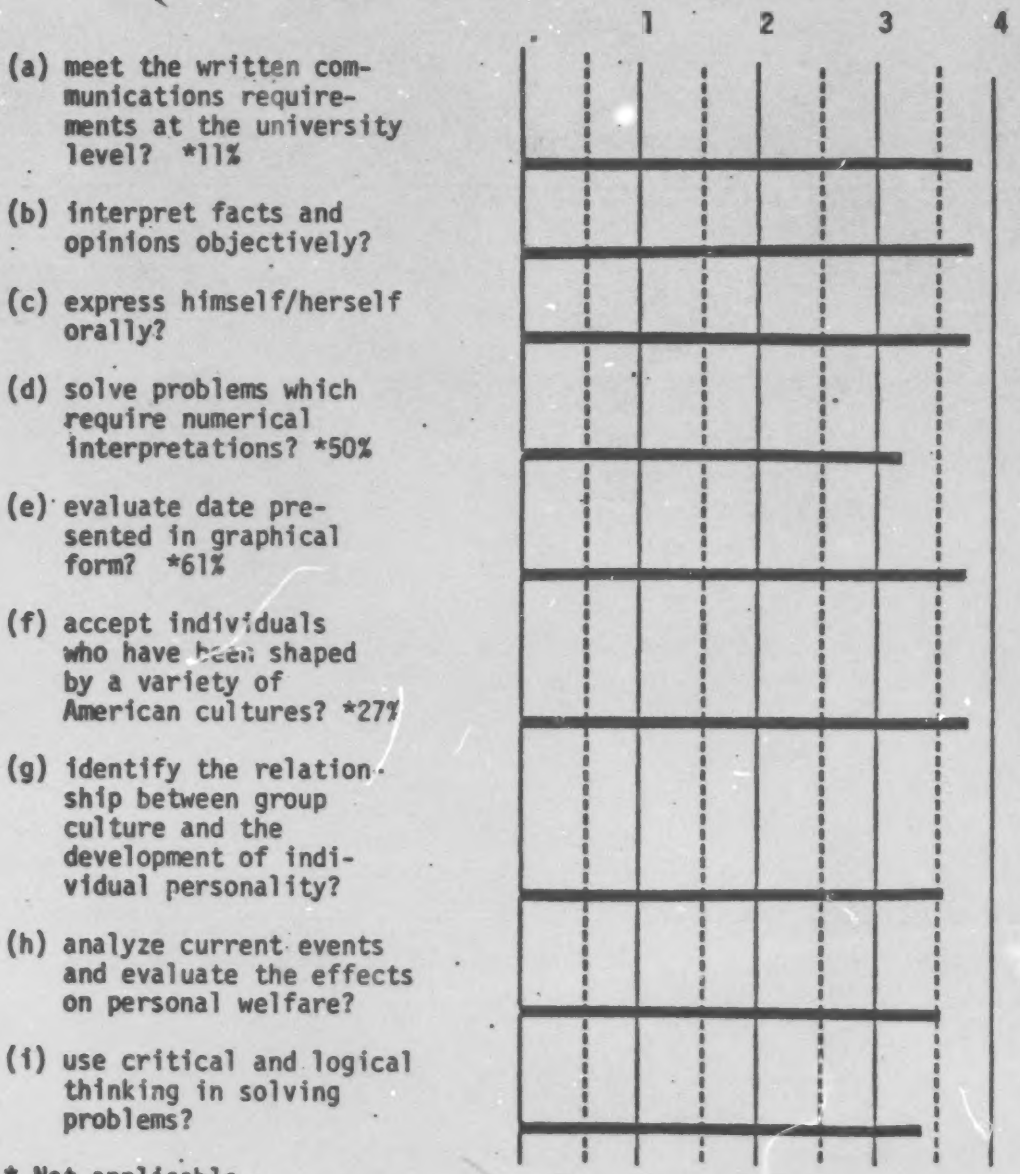
University Instructors. The university instructors who returned the questionnaires in each program were:

	N	%
Pre-Teaching	23	79
Pre-Business Administration	14	93
Pre-Police Science	10	100

The criteria-referenced questions were analyzed, including the "not applicable" responses, and the results were placed on a bar graph.

FIGURE 5

Mean Responses of University Instructors to the Criterion-Referenced Questions on the Pre-Teaching Questionnaire


1
2
3
4
(a) meet the written communications requirements at the university level? *11%
(b) interpret facts and opinions objectively?
(c) express himself/herself orally?
(d) solve problems which require numerical interpretations? *50%
(e) evaluate date presented in graphical form? *61%
(f) accept individuals who have been shaped by a variety of American cultures? *27%
(g) identify the relationship between group culture and the development of individual personality?
(h) analyze current events and evaluate the effects on personal welfare?
(i) use critical and logical thinking in solving problems?

* Not applicable

FIGURE 6

Mean Response of University Instructors
to the Criterion-Referenced Questions
On the Pre-Business Administration Questionnaire

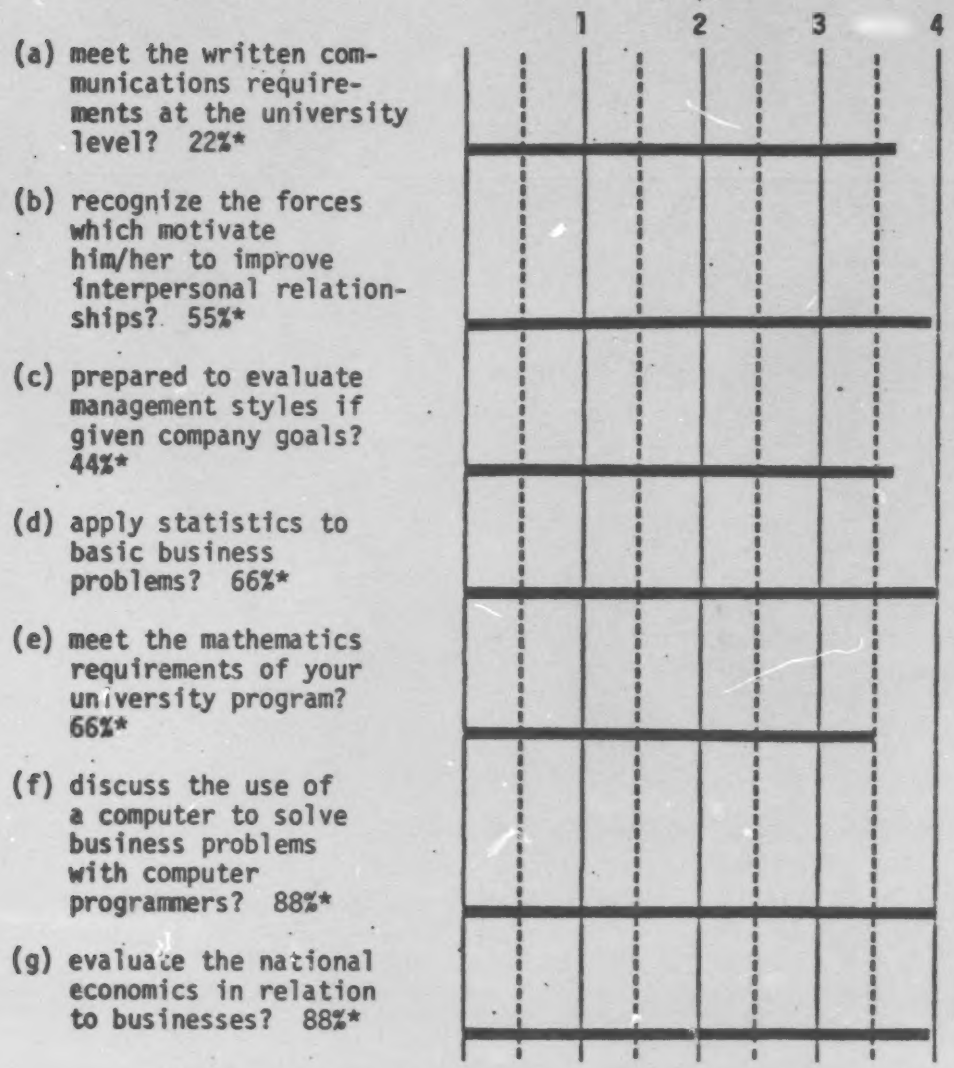

1
2
3
4
(a) meet the written communications requirements at the university level? 22%*
(b) recognize the forces which motivate him/her to improve interpersonal relationships? 55%*
(c) prepared to evaluate management styles if given company goals? 44%*
(d) apply statistics to basic business problems? 66%*
(e) meet the mathematics requirements of your university program? 66%*
(f) discuss the use of a computer to solve business problems with computer programmers? 88%*
(g) evaluate the national economics in relation to businesses? 88%*

FIGURE 6

Mean Response of University Instructors
to the Criterion-Referenced Questions
On the Pre-Business Administration Questionnaire
Continued

(h) display knowledge of accounting systems adequate for a small business? 55%*

(i) analyze cost of products and services? 77%*

(j) describing pricing techniques in relation to products and factor markets? 88%*

*Not Applicable

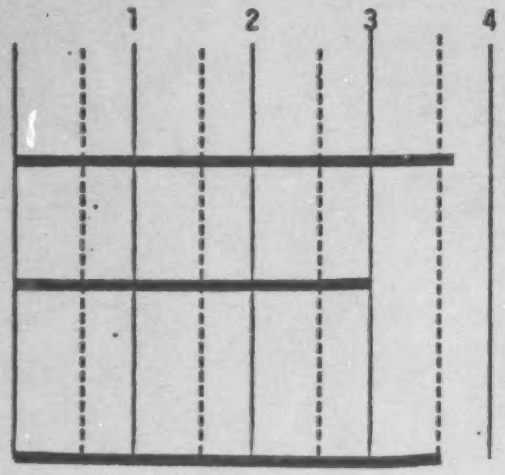


FIGURE 7

Mean Responses of University
Instructors to the Criterion-Referenced
Questions on the Pre-Police Science Questionnaire

(a) meet all the written communications requirements at the university level? *10%

(b) interpret facts and opinions objectively? *10%

(c) express themselves orally both in class and to peer groups? *10%

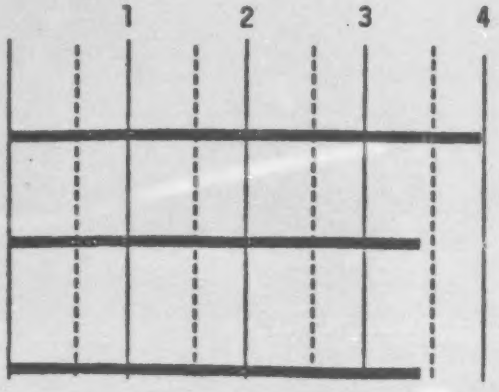
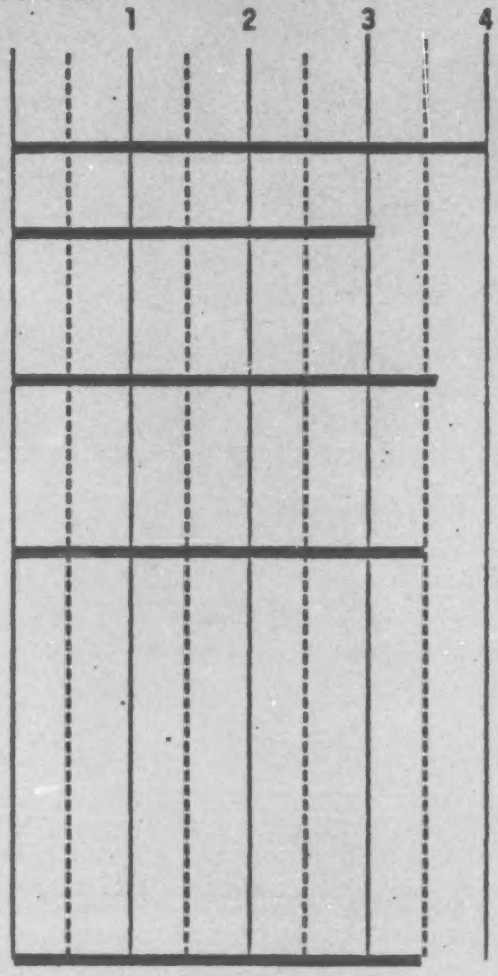


FIGURE 7

Mean Responses of University
Instructors to the Criterion-Referenced
Questions on the Pre-Police Science Questionnaire
Continued



(d) solve problems which require numerical interpretations? *90%

(e) evaluate data presented in graphical form?

(f) accept individuals who have been shaped by a variety of American cultures. *20%

(g) utilize their knowledge of criminal justice agencies and the court system to solve problems.

(h) explain the overall operation of law enforcement agencies as they relate to U.S. Supreme Court decisions? *100%

(i) explain the management and operational functions, role and facilities of a police department? *80%

* Not applicable

The comments were also analyzed and this analysis was sent to all program managers and faculty members in the system for their review.

A final report was prepared for each program (Appendix F). These reports were submitted to all program managers and faculty members for corrections and interpretation. These reports were accepted as written and were then introduced into formal decision-making process.

Component Five: Introducing Data into the Decision-Making Process

The final reports were forwarded to the campus directors, directors of instruction, and collegium directors. Also, these reports were sent to counselors, librarians, graduates, instructors at the University of South Florida who participated, as well as department chairmen and deans at the University of South Florida. The coordinator for community colleges at the University of South Florida also was sent a copy of the final reports.

Responses were received from the campus director at Dale Mabry, the directors of instruction at Dale Mabry and Ybor City, and the coordinator for community colleges at the University of South Florida (Appendix G).

Of the individuals who reviewed the data, 19 recommended curriculum changes, ten suggested revisions to the questionnaire, and five suggested revisions of the goal statements.

These reports, as well as a review of the system, were presented by the Director of Follow-up to Hillsborough Community College decision-making committees. The Academic Affairs Council, Planned

Program Budgeting System/Management Information Systems Committee and the Committee for Articulation committee between Hillsborough Community College, Hillsborough County Board of Public Instruction and the University of South Florida, also the Hillsborough Community College President's Council, and the Hillsborough Community College District Board of Trustees. The reports were well received by each committee and the members took an active part in asking questions.

The Academic Affairs Council recommended that the Director of Follow-up be made a research member of this committee. Furthermore, they moved that the agendas and minutes of all meetings be sent to the Director of Follow-up.

The P.P.B.S./M.I.S. Committee requested clarification from the President's Council as to who would be responsible for implementing suggestions, and suggested the P.P.B.S./M./I.S. Committee be responsible for monitoring the system.

The President's Council received the reports and further requested that the Director of Follow-up present an interim report within six months regarding the progress made to implement recommendations.

The Articulation Committee received the report with interest and requested to be kept informed. The Hillsborough Community College District Board of Trustees made no comment on the report.

Utilization of the five components for developing a graduate follow-up system for decision-making regarding programs and/or curriculum was successful. Each component provided the necessary participation by faculty members to implement change and decision-making by those members of the professional staff closest to the students.

CHAPTER V

Discussion and Conclusions

The System

This chapter presents a framework for use by community colleges developing graduate follow-up systems for specific associate in arts programs. The Hillsborough system describes the methods by which a community college can identify, in performance or competency based terms, the desired outcomes of each program and measure graduates' achievement of these outcomes.

It is basic to the development of this system that mutual understanding and willingness to participate by individuals at all levels of the community college and four-year institutions involved be undertaken. Therefore, the philosophy of the community college and four-year colleges and universities regarding curriculum improvement and evaluation must be understood. The administrative structure of the community college and four-year colleges and universities that are a part of the system must be examined and considered. Approval to implement the system and statements of support from the necessary members of the community college administrative staff must be received. Further, it is important that the necessary financial commitment to this project be achieved before any work is begun.

It is of equal importance that faculty, who are directly responsible for implementation of curriculum designed to achieve the program goals, support the research, understand the project, and express willingness to assist in development, implementation and evaluation of the project. Faculty must be encouraged to make recommendations for changes in program goals and curriculum that are identified as a result of this project. Everett (1969)states that faculty involvement is an important aspect in the development of any system designed to evaluate curriculum. This faculty involvement creates an atmosphere of greater acceptance and more effective change.

Finally, a Director of Follow-up for the entire system must be named and provided with sufficient support and administrative flexibility to work effectively with all the components of the system. Everett (1969) states that there are strong feelings among faculty and administration that there should be centralized responsiblity for follow-up studies as part of institutional research.

Having achieved support and understanding with all these individuals, a pilot project is ready to be established. The pilot project should involve no more programs that the Director of Follow-up is able to handle, but must contain enough programs to provide for valid evaluation of the system. It is suggested that

three to five transfer programs be used in the pilot project.

Another consideration before the pilot project is begun is the development of the sequence of events considering the institutions yearly calendar of the four-year institutions and community college.

Component One: Developing Program Goals

An institutional definition of program must be established by the community college beginning this project. This can be done by examining the community college catalog and identifying the professional options provided by the institution. However, in some catalogs these are not well defined.

A faculty member who is responsible for development of the major core curriculum in these professional courses should be named program manager by the administration. To begin the pilot projects, program managers should be named in the spring of the preceding year. (Appendix H)

Some characteristics of the individual faculty member should be considered when the administration is naming program managers. These should include ability to communicate effectively with other faculty members willingness to accept the position, experience in the curriculum area for which they are developing goals, high credibility with faculty members regarding their interest in students and curriculum development, ability to conduct themselves in a non-intimidating way with other faculty members. There

should be some type of compensation for this management responsibility.

The Director of Follow-up should conduct informal meetings in the spring with each program manager to explain the system. As a result of these meetings, each program manager will develop ten to twelve goals for his program stated in performance or competency-based language. Also, the Director of Follow-up should use these meetings to identify program managers who indicate an interest in becoming part of the pilot project. Those interested program managers should provide the Director of Follow-up with a list of faculty who would be willing to act as resource people for their program. These faculty members should be included in the development of the project at each step.

In identifying pilot programs some criteria to consider are: sufficient number of graduates to provide an adequate population for the pilot project and for continuing evaluation, a diverse core curriculum, and a program manager willing to participate. When the pilot programs are identified the program goals should be reviewed by the Director to insure the goals are stated in performance or competency-based language and agree with the institutional goals. They should then be returned to the program managers to be rank ordered. These rank-ordered goals provide the basis for the Director of Follow-up to develop the questionnaire. At no time in the development of the program goals should the Director evaluate the content of these goals. The relevancy and

validity of the goals are evaluated by the self-correcting mechanism of the system.

Component Two: Development of the Instruments

The design of the instruments should be developed by the Director of Follow-up using the assistance of a psychometrist. All questionnaires should be short requiring a maximum of fifteen minutes to complete.

The graduate questionnaires should include descriptive information, criterion-referenced questions, and open-ended questions. Each section should be distinguished in some manner. This can be done by changing type, spacing or margins. The criterion-referenced questions should cover all the performance based statements regarding the program as identified by the program manager and also provide for the evaluation of support services, such as: library, learning laboratory, student government, counseling, financial aid, and placement.

The open-ended questions should allow for specific suggestions regarding curriculum additions or deletions, and descriptions of any transfer problems they have encountered. The open-ended questions should also allow for perceptions regarding the specific strengths and weaknesses of the program.

All graduate questionnaires, in order to comply with the Buckley Amendment, must contain a question which allows the Director of Follow-up to obtain infromation from the four-year colleges and

universities. The Buckley Amendment is public law 93-980, "The Faculty Educational Rights and Privacy Act of 1974", and prohibits the release of information regarding a students' educational progress to anyone other than those individuals designated by the students. The easiest way to comply with this act, which went into effect in January 1975, is to have the graduate agree to the release of information.

Instructors' Questionnaire: The instructors' questionnaire should contain similar criterion-referenced questions in the same order as the graduates questionnaire to allow for easy comparison of the results, and open-ended questions regarding specific curriculum problems. The questionnaire for the instructors at the four-year colleges and universities should be prepared prior to the meeting with these individuals.

At the time of the first formal or informal meeting with university personnel, the Director of Follow-up should explain the process, structure, and expected results of the project, as well as the use of the results by the community college and their part in the system. The instructors at the four-year colleges and universities should be encouraged to offer suggestions or recommendations for revision to the system or instruments. These suggestions should be incorporated whenever possible.

As drafts of each questionnaire are developed, they should be widely distributed to faculty members and program managers for suggestions and revisions. When consensus has been reached, the graduates' questionnaire should be tried with one or more second year classes to evaluate reaction to the format and vocabulary. The pilot instrument for graduates' should be completed in early fall. The instructors' questionnaire should be completed and evaluated by program managers by late fall.

Component Three: Collecting of Data

Identifying Graduates: Sixty graduates from each program should be identified, using a table of random numbers. In late fall, preferably around Thanksgiving, a questionnaire, a personalized letter of explanation and a self-addressed stamped envelope are mailed to the first fifty of these graduates. When mail is returned undeliverable, an additional name from the list should be added to the sample.

The graduate questionnaire should be printed on pink or yellow paper to improve returns. If the program manager is someone most graduates come in contact with, the personalized letter should be written and signed by the program manager.

A second mailing should be done in late fall, between Thanksgiving and Christmas, varying the letter somewhat, and stressing the importance of a reply. A third mailing should be done during

the Christmas vacation, using the same letter as the second mailing with a handwritten request for a reply as a postscript to the letter in the same handwriting as the signature.

Identifying Four-Year Colleges and Universities: The identification of the four-year colleges or universities to be included in the studies should be done from the graduate questionnaires returned. Only four-year colleges or universities attended by ten percent of the graduates from any specific program should be included in the evaluation of that program. The list of all four-year colleges and universities to be included should be completed by late January.

Personalized contacts should be made with each four-year college or university to be included in the system. For large institutions the contacts should be made by departments. In the case of smaller institutions, these contacts may be made with a Dean, Vice-President or President. These personalized contacts should be made by visiting the institution. If this is not possible, a letter followed by a telephone contact would be appropriate. As a result of these contacts, the system and the use of community college will make of the results should be explained. Further, the four-year college or university should be requested to explain the easiest method of identifying each graduate's courses and method of identifying instructors. If the four-year college or university has a computer printout each semester that identifies the courses in which the

students are registered, this should be utilized. Contact with each department is necessary to verify the instructors for these courses. This should be completed by the middle of the semester, in order that letters and questionnaire can be mailed.

The letters should be mailed approximately four weeks before the end of the quarter or just before mid-semester if the semester calendar is used. These letters should briefly explain the project, identify the graduate by name and social security number, identify the course in which the student is registered, and explain that the required permission to release information has been obtained from the graduate as required by the Buckley Amendment. If no response is received from the instructor in four weeks, a second mailing should be done, followed by a third mailing, two weeks later. All questionnaires should be collected from the University by May.

Component Four: Evaluating Data

The Director of Follow-up should prepare an analysis of all questionnaires before the end of May. This analysis should be descriptive and non-judgmental. By using a questioning technique in an accompanying memorandum, the attention of the program managers and faculty members may be focused on particular issues.

Graduate Data: Graduate Data should be analyzed using methods that will provide quick and easy reading for program managers and faculty members. Each section should be analyzed separately, providing

faculty members with descriptive data regarding present status, of graduates, analysis of criterion-referenced questions and a summary of open-ended questions. The criterion-referenced questions should be analyzed using a graphical display.

Instructors Data: The analysis of the University instructors' questionnaire also should be done, using the same methods. The criterion-referenced bar graph should be drawn in the same order as that for the graduates for easy comparison. Any comments pertaining to the open-ended questions should be presented.

Program Managers and Faculty Members: The program managers and faculty should be asked to review the data, answer any question posed and complete this report by the middle of June. As a result of these data, the program managers should be encouraged to recommend changes in curriculum and/or program goals that are identified. If the program managers and faculty members do not respond to the request, a second request should be sent giving a seven day deadline. A third request should be made in person of those not responding.

Before the total report is completed, the program managers and faculty members should be asked to review the instruments and system and to recommend changes for the following year. This system of review and constant revision of the goals, system, instruments and results is of major importance to the success of the project.

Using the data from graduates, university instructors, program managers and faculty members, a total report on each program should be prepared by July. This report should be sent to all program managers and faculty members for consensus.

Component Five: Introducing Data into the Decision Making Process

It is important to review the decision-making structure of the institution in establishing this component. All community college committees, department personnel as well as administrative staff that is in the position to make decisions regarding programs, curriculum or finances should receive the program evaluations. It is also important that copies of the evaluation be sent to the University administrators and instructors who participated. Unless the final report is widely distributed the communications network will be broken.

The final reports should be distributed with a personalized memorandum reuqesting permission for the Director to appear before committees and offering to speak to individuals. Encouraging individuals and committees to become more involved will make expansion of the program easier.

The final report should be in broad terms, outlining the participation in the report, describing the data collected and reporting what changes are already being implemented by the faculty members and program managers. This report should also

describe any changes that should be implemented at an institutional level as identified by this research. These changes might be in recruitment, catalog, or library and resource material.

This entire system and its five components contain a built-in revision and validation system. As long as all the people involved are open, honest and are not intimidated by this system, programs and curriculum will be receptive to the changing needs of the students and the higher education community as a whole.

Summary

This major research project developed and implemented a system of five components for follow-up studies of Associate of Arts graduates. This project provides a process that can be used by any community college in Florida as mandated by Florida Statutes S230.7651 and guidelines of the State Department of Education 6A-8.581(4).

Using performance or competencies identified by Hillsborough Community College faculty members for each program, the perceptions of graduates and university instructors as to the graduates academic preparation were analyzed.

The system design contains a self-correcting mechanism of feedback and revision for each of the five components as well as the entire system. Therefore, the facilitation of this system is not required to make judgmental decisions regarding the adequacy

of the program goals as stated in performance or competencies. However, the facilitation is required to point out facts that emerge as a result of the data if the program managers or faculty members do not appear to be acting on the data received.

This system is built on participating management and a pilot project must enlist the aid of program managers and faculty members willing to cooperate. After the initial project, if the participation is voluntary and the project successful, expansion of the system will be considered part of institutional research and will be anticipated by program managers and faculty members alike.

The results of the implementation of this system at Hillsborough Community College were fruitful curriculum revision suggestions for each program which were implemented. The decision makers received the data with interest and encouraged the program managers and faculty members to implement and suggested revisions. The system, questionnaire and goal revisions suggested by the faculty and program managers were adopted and implemented.

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APPENDIX A

October 16, 1974

Dear

As a graduate from Hillsborough Community College in the pre-teaching curriculum, you are more keenly aware of the need for evaluation of educational programs. To assist Hillsborough Community College in fulfilling this goal, would you complete this questionnaire and return it in the enclosed self-addressed stamped envelope.

Any further comments you care to make will be appreciated. These comments can be made on the back of the questionnaire.

Since it is human nature to procrastinate in completing questionnaires, your immediate attention would be greatly appreciated.

Sincerely,

Patricia Louise Gill
Assistant Director
Placement and Follow-up

PLG:lss

APPENDIX A CONTINUED

November 25, 1974

Dear

It is very important to present Hillsborough Community College students that the graduates chosen to participate in Hillsborough Community College follow-up project respond to the enclosed questionnaire. National studies indicate the most reliable source of information about transfer program are graduates from that program.

If you would like to make any comments or ask any questions please feel free to call my office Monday through Friday, 8:30-5:00. Your cooperation is greatly appreciated.

Sincerely,

Patricia Louise Gill
Assistant Director
Placement and Follow-up

PLG:bjc

APPENDIX B

Dear

A pilot project to begin to implement Florida State Guildines 6A-8.581(4) has begun at Hillsborough Community College. As part of this project, Hillsborough Community College is conducting follow-up studies on 30 Pre-Teaching graduates during 1974-75. _____ has identified you as one of their instructors or their advisor, and in this capacity would you complete the enclosed questionnaire.

The state guildelines indicate that follow-up studies should be conducted using performance or competency based terms. Therefore, the questionnaire has been designed to obtain your preceptions of the students success in achieving the stated goals of their two year A.A. program. The results of this study will be made available to you.

Thank you for your cooperation.

Sincerely,

Patricia Louise Gill
Associate Director
Placement and Follow-up

APPENDIX C

HILLSBOROUGH COMMUNITY COLLEGE - 1975
Pre-Teaching Program Goals

1. The graduate will demonstrate ability to communicate effectively, both in writing and speaking.

2. The graduate will exhibit critical and logical thinking in evaluating given information.

3. The graduate will be able to identify the effects of ethnic culture on individual development both from a historic and present day view and demonstrate this by improving interpersonal relations.

4. The graduate will relate daily political, social, and economic events to patterns of past historical incidents for the purpose of making decisions in their personal life.

5. The graduate will demonstrate an ability to interpret scientific facts and their implications to future human development for the purpose of making personal and economic decisions.

6. The graduate will demonstrate basic mathematical skills by solving problems and interpretating graphical data.

7. The graduate will demonstrate a better understanding of self by establishing personal goals, improving interpersonal relationships and accepting individual differences.

8. The graduate will develop his or her own value system regarding art and art forms and demonstrate this by attending chosen presentations.

APPENDIX C CONTINUED

Hillsborough Community College 1975
Pre-Business Administration Program Goals

1. The graduate will demonstrate ability to communicate effectively in writing.

2. The graduate will demonstrate ability to use mathematical formulas in solving and interpretation of data related to business.

3. The graduate will be able to apply statistical methodology to basic business problems.

4. The graduate will be able to interpret scientific facts and the implications of the role of scientific data to future personal and human development.

5. The graduate will evaluate the use of data processing systems in business and demonstrate this by presenting adequate information to a computer programmer to facilitate the solving of standard business accounting problems.

6. The graduate will be able to evaluate the area of national economics in relation to banking systems, international trade and governmental policies.

7. The graduate will be able to identify the effect of culture on individual development, both from a historic and present day view, and recognize forces which motivate interpersonal development.

8. The graduate will be able to demonsrate good management policies by relating individual management objective to company goals.

9. The graduate will be able to set up and implement an accounting system for a small business of 10 million dollars or less per year, or a standard accounting system for a branch office of a larger business.

10. The graduate will understand the theory and logic of good accounting procedures and demonstrate this by recording properly, business transactions.

11. The graduate will be able to demonstrate managerial control in an accounting system by implementing cost analysis to products and services.

APPENDIX C CONTINUED

Hillsborough Community College
Pre-Police Science Program Goals
1975

1. The graduate will demonstrate ability to communicate effectively, both in writing and speaking using the vocabulary and style necessary in police work.

2. The graduate will be able to conduct an investigation and demonstrate this by accurate notes, sketches and reports.

3. The graduate will be able to apply the scientific method in the collection, identification and presentation of the evidence in a police investigation.

4. The graduate will be able to utilize his/her knowledge of criminal justice agencies and the court system in solving daily problems in police work.

5. The graduate will be able to classify crimes.

6. The graduate will be able to describe the basic capabilities and services that may be provided by a crime laboratory.

7. The graduate will demonstrate understanding of the U.S. Supreme Courts decision relating to the overall operation of the Law enfocement agencies.

8. The graduate will be able to describe managerial and administrative principles involved in traffic enforcement and education.

9. The graduate will be able to demonstrate an understanding of the management and operational functions, role and facilities of a police department.

10. The graduate will develop a better understanding of self and demonstrate this through improving interpersonal relations and acceptance of individual differences.

11. The graduate will be able to identify the effect of culture on individual development both from a historic and present day view and relate this information to daily police work.

12. The graduate will demonstrate basic mathematical skills in problem solving and intepretation of data.

APPENDIX D

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Teaching - Graduate Survey

I. Name_____ Address _____

_____ Zip _____

1. Are you attending college: Full-time ( ) Part-time ( ) No ( ) Major Area _____

2. What college are you attending? _____

3. If employed: Is employment related to H.C.C. degree? Yes ( ) No ( ) Where? _____ Supervisor _____

4. Did you attend H.C.C.: day ( ) evening ( ) weekend college ( )

5. May we send a similar questionnaire to your university instructors? Yes ( ) No ( )

II. *Did your community college program prepare you to:*

	Yes	To Some Extent	Poorly	No
a) *write adequately to meet all the requirements at the university level, i.e. term papers, exams, and so on?*	( )	( )	( )	( )
b) *interpret facts and opinions objectively?*	( )	( )	( )	( )
c) *express yourself orally both in class and to peer groups?*	( )	( )	( )	( )
d) *solve problems which require numerical interpretations?*	( )	( )	( )	( )

APPENDIX D CONTINUED

e) evaluate data presented in graphical form?	( )	( )	( )	( )
f) tolerate individuals who have been shaped by a variety of American cultures?	( )	( )	( )	( )
g) identify the relationship between group culture and the development of culture and one's individual personality?	( )	( )	( )	( )
h) analyze current events and evaluate their effects on your personal welfare?	( )	( )	( )	( )
i) solve problems using critical and logical thinking?	( )	( )	( )	( )
j) evaluate the effectiveness in style and form of the variety of art forms which surround you?	( )	( )	( )	( )
k) evaluate the facts derived from scientific investigations and relate them to their implications on human welfare?	( )	( )	( )	( )
l) identify specific historic actions which help to shape the world today?	( )	( )	( )	( )
m) recognize the forces which motivate you and influence your interpersonal relationships?	( )	( )	( )	( )
n) to use the library and card catalog to locate needed references?	( )	( )	( )	( )
o) to use periodical indexes?	( )	( )	( )	( )

APPENDIX D CONTINUED

III. 1. What course or courses in the pre-teaching program did you find most valuable? Why? _____

_____

2. Which course or courses did you find least valuable in your pre-teaching program? Why? _____

3. What would you substitute? _____

4. Did you find the learning resources facilities adequate at H.C.C.? Yes ( ) No ( )

5. While you were at H.C.C., did you avail yourself of the services offered by the counseling staff? Yes ( ) No ( )

IV. *Did your H.C.C. counseling staff:*

	Yes	To Some Extent	Poorly	No
1. *assist you in making suitable post graduation plans?*	( )	( )	( )	( )
2. *help you learn to make productive decisions?*	( )	( )	( )	( )
3. *make you aware of alternative career possibilities?*	( )	( )	( )	( )
4. *refer you to other appropriate sources of information?*	( )	( )	( )	( )
5. *introduce you to other services available to students such as:*	( )	( )	( )	( )
a) library & learning laboratory				
b) financial aid				
c) job placement				
d) student government				
e) social organizations				
6. *assist you in registering?*	( )	( )	( )	( )
7. *evaluate the placement tests for proper academic level?*	( )	( )	( )	( )

APPENDIX D CONTINUED

Hillsborough Community College
Pre-Business Administration Graduate Survey

NAME _____ ADDRESS _____

_____ ZIP _____

1. Are you attending college? Full-time ( ) Part-time ( )
   No ( ) Major Area _____

2. What college are you attending? _____

3. If employed: Is employment related to H.C.C. degree?

   Yes ( ) No ( ) Where? _____ Supervisor _____

4. May we send a similar questionaire to your university instructors? Yes ( ) No ( )

   Signature _____

5. *Did your Pre-Business Administrative program at H.C.C. prepare you to:*

		Yes	To Some Extent	Poorly	No
a)	*meet the written communications requirements at the university level?*	( )	( )	( )	( )
b)	*meet the mathematics requirements of your University program?*	( )	( )	( )	( )
c)	*apply statistics to basic business problems?*	( )	( )	( )	( )
d)	*evaluate facts derived from scientific investigations and relate them to their implications on human welfare?*	( )	( )	( )	( )
e)	*discuss the use of a computer to solve business problems with computer programmers and other business students?*	( )	( )	( )	( )

APPENDIX D CONTINUED

f) *evaluate the national economics in relation to businesses?*	( )	( )	( )	( )
g) *tolerate individuals who have been shaped by a variety of American cultures?*	( )	( )	( )	( )
h) *help to recognize the forces which motivate you and influence your interpersonal relationships?*	( )	( )	( )	( )
i) *evaluate company goals and display a management style in keeping with these goals?*	( )	( )	( )	( )
j) *to set up and implement an accounting system for a small business?*	( )	( )	( )	( )
k) *demonstrate good accounting procedures by properly recording business transactions?*	( )	( )	( )	( )
l) *calculate cost analysis of products and services?*	( )	( )	( )	( )
m) *to use the library and card catalog to locate needed references?*	( )	( )	( )	( )
n) *to use periodical indexes to locate information?*	( )	( )	( )	( )

6. What course or courses in the Pre-Business Administration area did you find most valuable? _____

_____

Why? _____

7. Which course or courses in the Pre-Business Administration area provided you with the least amount of useful information?

_____

APPENDIX D CONTINUED

8. What type of course would you substitute for the above? _____

_____

9. Did you find that the resources available in the library and learning laboratory provided the materials necessary for your studies? Yes ( ) No ( )

What changes would you recommend? _____

_____

10. *Did your H.C.C. counseling staff:*

	Yes	To Some Extent	Poorly	No
1. *assist you in making suitable post graduation plans?*	( )	( )	( )	( )
2. *help you learn to make productive decisions?*	( )	( )	( )	( )
3. *make you aware of alternative career possibilities?*	( )	( )	( )	( )
4. *refer you to other appropriate sources of information?*	( )	( )	( )	( )
5. *introduce you to other services available to students such as:*	( )	( )	( )	( )
a) *library & learning laboratory*				
b) *financial aid*				
c) *job placement*				
d) *student government*				
e) *social organizations*				
6. *assist you in registering?*	( )	( )	( )	( )
7. *evaluate the placement tests for proper academic level?*	( )	( )	( )	( )

APPENDIX D CONTINUED

HILLSBOROUGH COMMUNITY COLLEGE
Pre-Police Science - Graduate Survey

I. NAME _____ ADDRESS _____ ZIP _____

1. Are you attending college? Full-time ( ) Part-time ( )
No ( ) Major Area _____

2. Are you intending to pursue a career in the area of criminal justice when you complete college? Yes ( ) No ( )

3. What college are you attending? _____

4. If employed: Is employment related to H.C.C. degree?
Yes ( ) No ( )

Where? _____ Supervisor _____

II. *Did your community college program prepare you to:*

	Yes	To Some Extent	Poorly	No
a) *write adequately to meet all the requirements at the university level, i.e. term papers, exams and so on?*	( )	( )	( )	( )
b) *communicate effectively?*				
c) *use the vocabulary and style necessary in police work and courses?*	( )	( )	( )	( )
d) *interpret facts and opinions objectively?*	( )	( )	( )	( )
e) *express yourself orally both in class and to peer groups?*	( )	( )	( )	( )
f) *solve problems which require numerical interpretations?*	( )	( )	( )	( )

APPENDIX D CONTINUED

f) solve problems which require numerical interpretations?	( )	( )	( )	( )
g) evaluate data presented in graphical form?	( )	( )	( )	( )
h) tolerate individuals who have been shaped by a variety of American cultures and relate your knowledge to police work?	( )	( )	( )	( )
i) identify the relationship between group culture and the development of a culture and one's individual personality?	( )	( )	( )	( )
j) analyze current events and evaluate their effects on police work?	( )	( )	( )	( )
k) utilize your knowledge of criminal justice agencies and the court system to solve problems in police work?	( )	( )	( )	( )
l) apply the scientific method in explaining or collecting the facts necessary in a police investigation?	( )	( )	( )	( )
m) explain the overall operation of law enforcement agencies as they relate to U.S. Supreme Court decisions?	( )	( )	( )	( )
n) explain the management and operational functions, role and facilities of a police department?	( )	( )	( )	( )
o) describe the capabilities and services that can be provided by a police laboratory?	( )	( )	( )	( )
p) describe enforcement and education required in traffic enforcement?	( )	( )	( )	( )

APPENDIX D CONTINUED

q) *recognize the forces which motivate you and influence your interpersonal relationships?*	( )	( )	( )	( )
r) *to use the library and card catalog to locate needed references?*	( )	( )	( )	( )
s) *to use periodical indexes?*	( )	( )	( )	( )

III. 1. What course or courses in the police science program did you find most valuable? Why? _____

_____

2. Which course should be omitted from the police science program? _____ Why? _____

3. What would you substitute? _____

4. While you were at H.C.C., did you avail yourself of the services offered by the counseling staff? Yes ( ) No ( )

5. Did you find the learning resources facilities adequate at H.C.C.? Yes ( ) No ( )

6. Do you plan to attend a Police Standard Training or other seminar in the near future? Yes ( ) No ( )

IV. *Did your H.C.C. counseling staff:*

	Yes	To Some Extent	Poorly	No
1. *assist you in making suitable post graduation plans?*	( )	( )	( )	( )
2. *help you learn to make productive decisions?*	( )	( )	( )	( )
3. *make you aware of alternative career possibilities?*	( )	( )	( )	( )

APPENDIX E

Dear

As more and more students are transferring from community colleges and universities, the state mandated follow-up program is becoming a reality. Hillsborough Community College has begun a pilot project to implement State Guildelines to evaluate graduates in performance or competency based terms.

_____ has been identified as a student in _____ during the Winter quarter of 1975. As the instructor of this course, would you complete the enclosed student evaluation and return it as soon as possible.

Thank you for your cooperation.

Sincerely,

Patricia Louise Gill,
Associate Director
Placement and Follow-up

PLG:lss

APPENDIX F

HILLSBOROUGH COMMUNITY COLLEGE
TAMPA, FLORIDA

MEMORANDUM

TO: Attached Distribution List

FROM: Patricia Gill

DATE: May 12, 1975

SUBJECT: PRE-TEACHING EVALUATION 1973-74 GRADUATES

The pilot project to evaluate graduates from this program has been completed. the data was collected using a random sample of thirty 1974 graduates of which 23 or 76 percent of the sample answered. The questionnaire of the University of South Florida instructors, who were requested to complete the questionnaire, 22 or 76 percent returned the questionnaire, while only 20 or 68 percent were able to complete the questionnaire.

The results of these questionnaires were evaluated by Hillsborough Community College program managers and faculty. The curriculum areas considered important to re-examine were Mathematics and Introduction to Education. Mathematics rated low on both the university instructors questionnaire and graduate questionnaire. Although, this would be an indication of need for examination, the required courses in this area have been reorganized in 1974-75 and the results of the next follow-up study should indicate the next step.

The graduates felt that the courses in Introduction to Education and Educational Psychology were so similar as not be be advantageous. Suggestions made by Hillsborough Community College faculty were to (a) Review the course outlines (b) consider revising the course outline where duplication seems evident (c) closer supervision of part-time faculty in the area.

While the instructors at University of South Florida felt Hillsborough Community College graduates were prepared to undertake the academic requirements of university work, they, as well as Hillsborough Community College program managers, felt the Pre-Teaching program should state Pre-Elementary teaching.

I would like to thank each and every one of you for the assistance you gave the Follow-up office at all stages of this evaluation.

APPENDIX F CONTINUED

HILLSBOROUGH COMMUNITY COLLEGE
TAMPA, FLORIDA

MEMORANDUM

TO: Attached Distribution List

FROM: Patricia Gill

DATE: May 12, 1975

SUBJECT: PRE-BUSINESS ADMINISTRATION EVALUATION 1973-74 GRADUATES

The pilot project to evaluate graduates from this program has been completed. The data was collected using a random sample of thirty 1974 graduates of which 26 or 86 percent of the sample answered the questionnaire. Of the 15 University of South Florida instructors, who were requested to complete the questionnaire, 13 or 86 percent returned the questionnaire; while only 10 or 66 were able to complete the questionnaire.

The instructors at University of South Florida felt the graduates were prepared to undertake the academic requirements of university work. The graduate indicated they could not discuss adequately the use of the computer in business.

A curriculum revisions supported by faculty and graduates was the addition of more Mathematics. It was suggested that closer evaluation of the program to which the graduate transfers be made in order to further evaluate this finding. Twenty-five (25) percent of the graduates responding, indicated a need for increased library reference material.

I would like to thank each and every one of you for the assistance you gave the Follow-up office at all stages in this evaluation.

APPENDIX F CONTINUED

HILLSBOROUGH COMMUNITY COLLEGE
TAMPA, FLORIDA

MEMORANDUM

TO: Attached Distribution List

FROM: Patricia Gill

DATE: April 21, 1975

SUBJECT: PRE-POLICE SCIENCE EVALUATION - 1973-1974

The pilot project to evaluate the 1973-74 graduates from this program has been completed. The data was collected using random sample of 30 graduates of which 22 graduates or 73% of the sample returned the questionnaire. Although the responses were not as good as we had hoped, the data was sufficient to indicate some revisions to the questionnaire and supported some curriculum revisions already in the process of being implemented.

The graduate questionnaire will be revised before the 1975-76 study is begun to evaluate graduates present career goals, and include the evaluation of support services.

There is a need to identify the final career goals of H.C.C. graduates from the program. While 59% of these graduates are attending university in criminal justice area, 72% of the graduates are attending university and may have a final career goal in the criminal justice area. Counseling can also assist in recruiting for this program, as at the moment this sample shows only 9% of the graduates are women, while the field is becoming more and more acceptable as a field for women.

The curriculum revisions supported by faculty and graduates were addition of courses in: traffic enforcement, prison systems, laboratory procedures, and court case evaluation. Two of these are being implemented in 1974-75 academic year Traffic Enforcement and Legal Rights of Prisoners, while two are already in the planning stage, increased laboratory work and a course in the evaluation of court cases.

APPENDIX F CONTINUED

Of the 45% of the graduates attending U.S.F. in the area of criminal justice, the university faculty felt that they were all prepared for a four-year college or university. There was some indication that the area of mathematics needs to be examined, but no conclusive results can be drawn from this small sample.

I would like to thank each and every one of you for the assistance you gave the follow-up office at all stages in this evaluation. We hope to increase our 1975-76 returns.

APPENDIX G

These are excellent. Suggest you recommend that the academic affairs council work closely with Program Coordinators, for evaluate results of survey and make necessary recommendations for changes etc. deemed necessary.

Bill T.

APPENDIX G CONTINUED

HILLSBOROUGH COMMUNITY COLLEGE
TAMPA, FLORIDA

MEMORANDUM

TO: Ms. Pat Gill

FROM: Ray Enterman

DATE: May 21, 1975

SUBJECT: PROGRAM EVALUATION 1974

I have reviewed the program evaluations which you submitted, and have the following comments:

Pre-Business Administration

The addition in Mathematics has been discussed with the Academic Affairs Council, and is under revision for resubmission to that group.

Pre-Teaching

The content outlines of Introduction to Education and Educational Psychology differ significantly; it would appear to me that the overlap may derive from teaching methods employed.

I do not understand the suggestion that this program should be designated Pre-Elementary teaching, since the curriculum is a broad foundational approach with little emphasis on any specific teaching methods. Where would the secondary or college teaching student begin?

I would be interested and anxious to share more detailed information on the response information as it is made available.

RE:ed

cc: W. Tripp
E. Mattson
Dr. D. Ferreira
S. Rampello

APPENDIX G CONTINUED

HILLSBOROUGH COMMUNITY COLLEGE
TAMPA, FLORIDA

MEMORANDUM

TO: Pat Gill

FROM: Sam Rampello

DATE: May 19, 1975

SUBJECT: PROGRAM EVALUATIONS

Pat, thank you for the information concerning program evaluation 1974. I read all of them with interest and plan to do the following things to meet some of the needs which were indicated in your memo.

1. a. I intend to have Mr. Joe Rodeiro meet with the pre-business administration faculty to discuss the need for increased library reference material.

   b. To review the curriculum and perhaps give greater emphasis to the impact of the computer in business.

2. a. I am most concerned that both in the pre-teaching evaluation and the pre-police science evaluation that the area of mathematics seemed to be deficient in the eyes of the graduates. I will discuss this with Mr. Rodeior and possibly a conference of all mathematics teachers can be held at a mutually acceptable time and location. I will strongly recommend that you would be invited to this meeting along with Mr. Entenman, Joe Rodeiro, and myself to see if we can address some of the problems which your survey has brought to light. Since mention has been made about part-time faculty, it might also be advisable that Henry Beltran and other administrators connected with part-time faculty also be invited to attend.

3. a. I concur wholeheatedly that more women should be recruited and counseled for the police science program. I will relate this information to Joe Rodeiro and ask him to work with Bill Strawn so that we might be able to increase the number of women students in the police science area.

Once again thank you for this very valuable information. I hope that we can make some positive adjustments as a result of your study.

SR/tr
cc: Dr. Seeker, Joe Rodeiro, Henry Beltran, Bill Strawn, Ray Enterman

APPENDIX H

Time Table for Follow-up Graduate Evaluation System

Fall

(1) Program managers and University personnel, information contacts made.

(2) Graduate and University instructors' questionnaires prepared, evaluated and revised.

(3) November 1st - Graduate questionnaire mailed representing graduates of the previous year.

(4) December (early) - 2nd graduate mailing.

(5) December (late) - 3rd graduate mailing.

Winter

(1) January - Identify graduates, University instructors.

(2) February (late) - First mailing of questionnaires to University faculty.

(3) March (early) - Graduate analysis prepared for Hillsborough Community College faculty.

Spring

(1) April (early) - 2nd mailing to University instructors.

(2) April (late) - 3rd mailing to University instructors.

(3) May (early) - Report of University instructors' responses sent to Hillsborough Community College faculty.

(4) May (late) - Total report prepared for Hillsborough Community College administrators, program managers and faculty.

APPENDIX H CONTINUED

(5) May (late) - New programs to be evaluated program goals presented to Academic Affairs Council for consensus.

Summer

(1) New questionnaires prepared.

(2) Second round of questionnaires revised and prepared.